

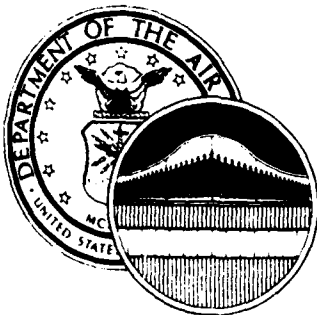
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AIR FORCE OCCUPATIONAL MEASUREMENT CENTER RANDOLPH AFB TX F/G 5/9
TELECOMMUNICATIONS SYSTEMS CAREER LADDER, AFSC 307X0.(U)
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OCCUPATIONAL SURVEY REPORT



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TELECOMMUNICATIONS SYSTEMS CAREER LADDER,

AFSC 307X0.

AFPT 90-307-401

JANUARY 1981

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OCCUPATIONAL ANALYSIS PROGRAM
USAF OCCUPATIONAL MEASUREMENT CENTER
AIR TRAINING COMMAND
RANDOLPH AFB, TEXAS 78148

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PREFACE

This report presents the results of a detailed Air Force Occupational Survey of the Telecommunications Systems Control (AFS 307X0) career ladder. This report was prepared for the 3410th Technical Training Group located at Keesler AFB MS in response to their request for occupational data to help validate resident technical school training for 307X0 personnel. Authority for conducting occupational surveys is contained in AFR 35-2. Computer outputs from which this report was produced are available for use by operating and training officials.

Computer programs for analyzing the occupational data were designed by Dr. Raymond E. Christal, Manpower and Personnel Division, Air Force Human Resources Laboratory (AFHRL), and were written by the Computer Programming Branch, Technical Services Division, AFHRL.

The Air Force occupational analysis program has been in existence since 1956 when initial research was undertaken by AFHRL (Air Force Systems Command) to develop a methodology for gathering and analyzing occupational information. In 1967, an operational occupational analysis program was established within the Air Training Command and surveys were produced annually for 12 enlisted specialties. In 1972, the program was expanded to conduct occupational surveys covering 51 career fields annually. In late 1976, the program was again expanded to include the survey of officer utilization fields, to permit special management applications projects, and to support interservice or joint service occupational analysis.

The survey instrument used in the present project was developed by Captain Gary Patterson, Inventory Development Specialist. First Lieutenant Gordon Curphy and Second Lieutenant Beverly Turman analyzed the survey data and wrote the final report. This report has been reviewed and approved by Lieutenant Colonel Jimmy L. Mitchell, Chief, Airman Career Ladders Analysis Section, Occupational Analysis Branch, USAF Occupational Measurement Center, Randolph AFB, Texas 78148.

Copies of this report are available to air staff sections, major commands, and other interested training and management personnel upon request to the USAF Occupational Measurement Center, attention to the Chief, Occupational Analysis Branch (OMY), Randolph AFB, Texas 78148.

This report has been reviewed and is approved.

BILLY C. McMASTER, Col, USAF
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SUMMARY OF RESULTS

1. Survey Coverage: Inventory booklets were administered to Telecommunications Systems Control (AFSC 307X0) personnel worldwide. Survey results are based on the responses from 1,289 AFS 307X0 incumbents (86 percent of assigned). A majority of the incumbents surveyed were assigned to AFCC.
2. Career Ladder Structure: DAFSC 307X0 personnel were found to be performing a wide variety of jobs. These jobs can be loosely grouped together into two functional areas: (1) Circuit Monitoring and Analysis and (2) Supervision, Training, and Administration. Personnel in the Circuit Monitoring and Analysis functional area make up approximately 69 percent of the total sample. Navigational Aids Communication Management Office (NCOM) Personnel and Circuit Analysis NCOs, perform a narrow job and have very low job satisfaction indicators.
3. Career Ladder Progression: Technical telecommunications tasks, such as performing circuit monitoring and analysis and maintaining telecommunications services, are indicative of 30730/50 personnel. Seven-skill level personnel are supervisors-technicians, spending approximately half of their job time on technical telecommunications tasks, and the remainder on supervisory tasks. DAFSC 30790 and CEM Code 30700 personnel are the supervisors and managers of the career ladder. These incumbents spend almost all of their job time performing supervisory or administrative tasks, and spend very little time performing technical telecommunications tasks.
4. Total Active Federal Military Service (TAFMS) Groups: The typical trend of an increasing percentage of time spent on supervisory tasks with increasing months TAFMS was noted. First enlistment incumbents (1-48 months TAFMS) perform a technical job involving primarily circuit monitoring and analysis and maintaining telecommunications services. Also, it is interesting to note that job satisfaction indicators for 307X0 first enlistment incumbents were somewhat greater than those for first enlistment incumbents in other related career areas.
5. Career Ladder Documents: The 3-, 5-, 7-, and 9-skill level AFR 39-1 Specialty Descriptions were found to provide a clear overview of the 307X0 career ladder. The STS, dated September 1979, appears comprehensive. The POI for the basic resident course E3ABR30730, dated September 1978, appears to provide adequate and comprehensive training for 307X0 first enlistment personnel.
6. Major Command Comparison: AFSC personnel were differentiated due to the nature of the circuit monitoring and analysis tasks they perform. ATC personnel conduct resident course classroom training, and were differentiated by training tasks. HQ USAF personnel were differentiated by the staff related tasks they performed. TAC personnel spend substantial amounts of job time erecting and maintaining tactical mobile communications units. Finally, SAC personnel spend more job time performing administrative tasks than all other MAJCOMs, and seem to perform a coordinating and dispatching type job.

7. Analysis of CONUS Versus Overseas Groups: The jobs performed by both DAFSC 30750 CONUS and overseas personnel are very similar with respect to the tasks performed and the time spent on those tasks. However, the job of DAFSC 30750 overseas respondents seem to be of a more technical control nature, due primarily to the fact that a number of the technical control functions are performed in CONUS by commercial companies.

8. Implications: Personnel in the 307X0 career ladder were found to be performing a wide variety of jobs, which is primarily due to the differing types of facilities 307X0 personnel work in. A review of job satisfaction indicators reveals that although a majority of 307X0 first enlistment personnel find their job interesting, only 32 percent plan to reenlist. One reason for these low reenlistment intentions could be the fact that civilian firms actively recruit 307X0 personnel. Job satisfaction data also reveals NCMO Personnel have very low job satisfaction indicators. Air Force managers and supervisors should try to find ways to improve the narrow and routine job these personnel perform.

OCCUPATIONAL SURVEY REPORT
TELECOMMUNICATIONS SYSTEMS CONTROL CAREER LADDER
(AFSC 307X0)

I. INTRODUCTION

This is a report of an occupational survey of the Telecommunications Systems Control career ladder (AFSC 307X0) completed by the Occupational Analysis Branch, USAF Occupational Measurement Center, in December 1980. A previous abbreviated survey of the 307X0 career ladder was published in October 1978.

Historically, in June of 1956 and February 1960, two career ladders were created which later merged to form the 307X0 career ladder. The first career ladder was designated by DAFSC 293X5, and incumbents were originally called Channel and Technical Control Operators. The second career ladder was designated by DAFSC 293X5A, and these incumbents were called Channel and Technical Control Operators, Channel Technical Control Center. These two ladders merged in March 1963 into the Telecommunications Systems Control career ladder (AFSC 307X0). Also in March 1963, the 9-skill level was first authorized and these personnel were given the DAFSC 30790 designation. Finally, in October 1978 CEM Code 30100 was created. However, effective as of October 1979, this career ladder was given its own CEM code, with this designation being changed from 30100 to 30700.

As described in AFR 39-1, personnel in this ladder are responsible for analyzing and monitoring the performance of radio and wire telecommunications circuits and equipment. In addition, these incumbents make operational adjustments of communications-electronics equipment and coordinate telecommunications systems control activities with connected facilities and lateral agencies. Also, some of these incumbents work at mobile communications tactical air support squadrons to help support TAC operations. Additionally, incumbents in this career ladder are responsible for Navigational Aids Communication Management Offices (NCMO).

The primary entry into this ladder is from Basic Military Training School (BMTS). All incumbents are sent through a one-month basic electronics course followed by the E3ABR30730 basic Telecommunications Systems Control course, both of which are taught at Keesler AFB, MS. The E3ABR30730 course is approximately 19 weeks in length, and approximately 400 incumbents per year successfully complete both resident technical school courses and enter the 307X0 career ladder.

The current project was undertaken in order to help validate the E3ABR30730 resident technical school course by providing Technical School personnel with task and job data for various 307X0 DAFSC and TAFMS groups. Topics discussed in this report include: (1) survey methodology; (2) the job structure found within the career ladder and how it relates to skill level and experience groups; (3) comparisons of the job structure and other survey data with career ladder documents; and (4) a comparison of the results of the current survey with the previous survey.

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SURVEY METHODOLOGY

Inventory Development

The data collection instrument for this occupational survey was USAF Job Inventory AFPT 90-307-401. As a starting point, tasks from the previous 307X0 inventory were reviewed for inclusion in a new AFS 307X0 task list. A new tentative task list was then formulated which included useable tasks from the prior inventory as well as new tasks obtained from a thorough research of current specialty publications and directives. This tentative task list was then taken out to the field to be validated by subject matter specialists working at three operational locations, as well as personnel at the Technical Training school located at Keesler AFB MS. In addition, data was collected from a field review that consisted of tentative job inventories being sent, reviewed for comments, and returned from 39 different worldwide locations. The resulting final inventory contained 403 tasks grouped under ten duty headings, in addition to a general background section that included such information as grade, TAFMS, job interest, and duty title.

Survey Administration

During the summer of 1980, job inventories were administered to DAFSC 307X0 personnel in worldwide locations by local consolidated base personnel offices. These job incumbents were selected through the use of the Uniform Airman Record (UAR) data tapes that are generated by the Air Force Manpower and Personnel Center (AFMPC) and maintained by the Air Force Human Resources Laboratory (AFHRL).

The 307X0 job inventory consisted of two sections: (1) a background section which included questions about such items as job satisfaction, equipment used, or the reenlistment intentions of the survey respondents, and (2) a task section listing all tasks which could be performed by career ladder personnel. Incumbents first checked the tasks they performed and then rated each task on a nine-point scale showing time spent on that task as compared to all other tasks checked. The rating scale ranged from one (very small amount of time spent) to nine (very large amount of time spent), with a rating of five representing an average amount of time spent performing a task.

To determine the relative amount of time an incumbent spends on each task, all of the incumbents ratings are assumed to account for 100 percent of his or her time spent on the job. The ratings are then summed and each task rating is then divided by the total number of task responses and the quotient is multiplied by 100. This procedure provides a basis for comparing tasks not only in terms of percent members performing, but also in terms of average percent time spent.

Survey Sample

Personnel were selected to participate in this survey so as to insure an accurate representation across all MAJCOM and paygrade groups. In this study, all incumbents with a 307X0 DAFSC were solicited for their responses. Table 1 reflects the major command distribution of personnel assigned to the 307X0 career ladder as of August 1980. As expected, the majority of the personnel assigned as well as the majority of personnel sampled belong to AFCC. Table 2 reflects the percentage distribution by paygrade, and reveals a representative paygrade sample was obtained. Table 3 reflects the distribution of the survey sample in terms of TAFMS groups. Overall, a representative sample was obtained, with 1,289 of the 1,511 incumbents (86 percent) assigned to this career ladder sampled.

Task Factor Administration

In addition to completing the job inventory, selected senior 307X0 personnel were also asked to complete a second booklet for either training emphasis or task difficulty. The task difficulty and training emphasis rating booklets are processed separately from the job inventories. This information is used in a number of different analyses discussed in more detail within the report.

Task Difficulty: Each senior NCO completing a task difficulty booklet was asked to rate all of the tasks on a nine-point scale from extremely low to extremely high as to the relative difficulty of that task. Difficulty is defined as the length of time it requires an average member to learn to do that task. Task difficulty data was independently solicited from 51 experienced 7- or 9-skill level personnel stationed worldwide. These raters were representative of the career ladder, with a majority of the task difficulty raters belonging to AFCC. The interrater reliability (as assessed through components of variance of standard group means) for the DAFSC 307X0 raters who returned booklets was .94 and is considered useable by normal reliability criterion. Ratings were then adjusted so that tasks of average difficulty have ratings of 5.0. The resulting data is a rank ordering of tasks indicating a degree of difficulty for each task in the inventory.

Job Difficulty Index (JDI). After computing a task difficulty index for each task item, it is then possible to compute a Job Difficulty Index (JDI) for the job groups identified in the survey analysis. This index provides a relative measure of which jobs, when compared to other jobs identified, are more or less difficult. An equation using the number of tasks performed and the average difficulty per unit time spent as variables is used to compute the JDI. The index ranges from one for very easy jobs to 25 for very difficult jobs. The data are adjusted so that the average job difficulty index is 13.00. Thus, the more time a group spends on difficult tasks, and the more tasks they perform, the higher will be their job difficulty index.

Training Emphasis. Individuals completing training emphasis booklets were asked to rate all of the tasks on a ten-point scale from no training required to extremely heavy training. Training emphasis is a rating of tasks

indicating where the emphasis should be placed on structured training for first-term personnel. Structured training is defined as training provided at resident technical schools, Field Training Detachments (FTD), Mobile Training Teams (MTT), Formal OJT, or any other organized training method.

Training emphasis data were independently collected from 45 experienced 7- or 9-skill level personnel stationed worldwide (see Table 5). The inter-rater reliability (as assessed through components of variance of standard group means) for these raters was .96, indicating a good agreement among raters as to which tasks required some form of structured training and which did not. In this specialty, tasks rated highest in training emphasis have ratings of 5.0 or above; the average training emphasis rating is 3.0; and those tasks with ratings less than 1.0 can be considered as requiring very little emphasis in training.

When used in conjunction with other factors, such as percent members performing, the task difficulty and training emphasis ratings can provide an insight into appropriate training. These data may help to validate the lengthening or shortening of specific units of instruction to further refine various training curriculum.

TABLE 1
COMMAND REPRESENTATION OF SURVEY SAMPLE

<u>COMMAND</u>	<u>PERCENT OF ASSIGNED*</u>	<u>PERCENT SAMPLE</u>
AFCC	76	85
USAFE	3	4
TAC	3	3
AF ELEMENTS	5	3
ATC	5	2
OTHER	<u>8</u>	<u>3</u>
TOTAL	100	100

TOTAL SAMPLED - 1,289
TOTAL ASSIGNED - 1,511
PERCENT SAMPLED - 86%

*AS OF AUGUST 1980

TABLE 2
PAYGRADE REPRESENTATION OF SURVEY SAMPLE

<u>PAYGRADE</u>	<u>PERCENT OF ASSIGNED</u>	<u>PERCENT OF SAMPLE</u>
AIRMAN	22	21
E-4	25	26
E-5	29	29
E-6	13	14
E-7	8	8
E-8	2	2
E-9	<u>1</u>	<u>*</u>
	100	100

* DENOTES LESS THAN ONE PERCENT

TABLE 3
TAFMS DISTRIBUTION OF SURVEY SAMPLE

	MONTHS TIME IN SERVICE					
	<u>1-48</u>	<u>49-96</u>	<u>97-144</u>	<u>145-192</u>	<u>193-240</u>	<u>241+</u>
NUMBER IN AFS 307X0 SAMPLE	414	369	203	127	108	65
PERCENT IN AFS 307X0 SAMPLE	32%	29%	16%	10%	8%	5%

TABLE 4
COMMAND REPRESENTATION OF 307X0 TASK DIFFICULTY RATERS

<u>COMMAND</u>	<u>PERCENT OF ASSIGNED</u>	<u>PERCENT OF TRAINING EMPHASIS RATERS</u>
AFCC	76	76
AF ELEMENTS	5	8
USAFE	3	2
TAC	3	4
ATC	5	2
OTHER	<u>8</u>	<u>8</u>
TOTAL	100	100

TABLE 5
COMMAND REPRESENTATION OF 307X0 TRAINING EMPHASIS RATERS

<u>COMMAND</u>	<u>PERCENT OF ASSIGNED</u>	<u>PERCENT OF TRAINING EMPHASIS RATERS</u>
AFCC	76	71
AF ELEMENTS	5	0
USAFE	3	6
TAC	3	2
ATC	5	2
OTHER	<u>8</u>	<u>19</u>
TOTAL	100	100

Data Processing and Analysis

Once job inventories are returned from the field, they are prepared so that task responses and background information can be optically scanned. Other biographical information (such as name, base, AUTOVON extension) are keypunched on to disks and entered directly into the computer. Once both sets of data are entered into the computer, the task, background, and biographical information are merged to form a complete case record for each respondent. Computer generated programs using Comprehensive Occupational Data Analysis Programs (CODAP) techniques are then applied to the data.

CODAP produces job descriptions for respondents based on their responses to specific inventory tasks. Computer generated job descriptions are available for DAFSC, TAFMS, and MAJCOM groups, and include such information as percent members performing each task, the average percent time spent performing each task, the percent members utilizing various pieces of equipment, and the cumulative average percent time spent by all members for each task in the inventory.

A key aspect of the USAF occupational analysis program is to examine the structure of career ladders in terms of what people are actually doing in the field, rather than how official career ladder documents say they are organized. This is accomplished by performing a cluster analysis on 307X0 respondents, with those incumbents who perform similar tasks and spend similar amounts of time on those tasks will be grouped together to reveal the natural structure of the Telecommunications Systems Control career ladder.

CAREER LADDER STRUCTURE

The structure of jobs within the Telecommunications Systems Control career ladder was examined on the basis of similarity of tasks performed and the percent of time ratings provided by job incumbents, independent of specialty or other background factors.

For the purpose of organizing individual jobs into similar units of work, an automated job clustering program is used. This hierarchical grouping is a basic part of the Comprehensive Occupational Data Analysis Program (CODAP) system for job analysis. Each individual job description in the sample is compared to every other job description in terms of tasks performed and the relative amount of time spent on each task in the inventory. The automated system is designed to locate the two job descriptions with the most similar tasks and percent time ratings and combine them to form a composite job description. In successive stages, new members are added to initial groups or new groups are formed based on the similarity of tasks and percent of time ratings in each individual job description. This procedure is continued until all individuals and groups are combined to form a single composite representing the total sample. The resulting analysis of the variety of groups of jobs serves to identify: (1) the number and characteristics of the different jobs which exist within the career ladder; (2) the tasks which tend to be performed together by the same respondents; and (3) the breadth or narrowness of the jobs which exist within the Telecommunications Systems Control career ladders.

The basic identifying group used in the hierarchical job structuring process is the Job Type. A job type is a group of individuals who perform many of the same tasks and spend similar amounts of time performing them. When there is a substantial degree of similarity between different job types, they are grouped together and labeled as Clusters. In many career fields, there are specialized job types that are too dissimilar to be grouped into any cluster. These unique groups are labeled Independent Job Types.

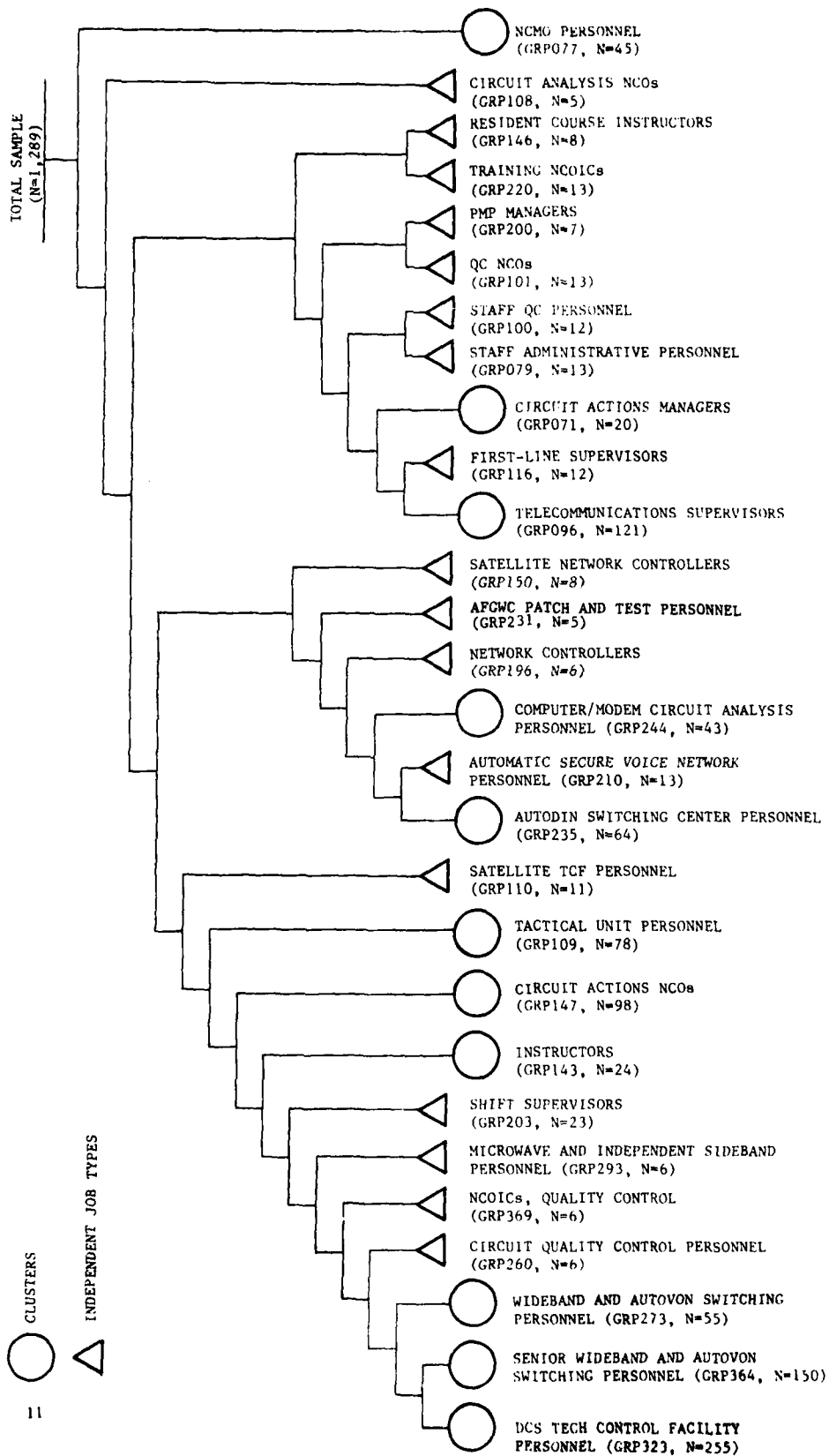
The jobs performed by Telecommunications Systems Control career ladder incumbents are illustrated in Figure 1. Based on the similarity of tasks performed and the amount of time spent performing each task, 11 clusters and 17 independent job types were identified. These clusters and independent job types are listed below.

- I. DEFENSE COMMUNICATIONS SERVICE (DCS) TECHNICAL CONTROL FACILITY (TCF) PERSONNEL (GRP323, N=255)
 - a. Junior Technical Controllers (GRP242, N=8)
 - b. Primary Technical Controllers (GRP463, N=154)
 - c. Administrative Technical Controllers (GRP513, N=7)
- II. SENIOR WIDEBAND AND AUTOVON SWITCHING PERSONNEL (GRP364, N=150)
 - a. Wideband and AUTOVON Switching Workers (GRP517, N=127)
 - b. Wideband and AUTOVON Switching Supervisors (GRP450, N=7)

- III. WIDEBAND AND AUTOVON SWITCHING PERSONNEL (GRP273, N=55)
 - a. Junior Shift Workers (GRP433, N=8)
 - b. Wideband TCF Shift Workers (GRP388, N=7)
 - c. Wideband and AUTOVON TCF Shift Workers (GRP428, N=6)
 - d. DCS TCF Shift Workers (GRP397, N=22)
- IV. CIRCUIT QUALITY CONTROL PERSONNEL (GRP260, N=6)
- V. NCOICs, QUALITY CONTROL (GRP369, N=6)
- VI. MICROWAVE AND INDEPENDENT SIDEBAND PERSONNEL (GRP293, N=6)
- VII. SHIFT SUPERVISORS (GRP203, N=23)
- VIII. INSTRUCTORS (GRP143, N=24)
 - a. Circuit Monitoring Instructors (GRP396, N=6)
 - b. Wideband Systems Instructors (GRP207, N=9)
- IX. CIRCUIT ACTIONS NCOs (GRP147, N=98)
 - a. Circuit Monitoring Personnel (GRP276, N=27)
 - b. Circuit Actions and NCMO Personnel (GRP305, N=7)
 - c. Circuit Actions NCOICs (GRP680, N=17)
 - d. CONUS Telecommunications NCOICs (GRP608, N=5)
 - e. Wideband and AUTOVON Circuit Actions NCOs (GRP511, N=10)
 - f. Patch and Test Facility Circuit Actions NCOs (GRP264, N=7)
 - g. Circuit Actions Shift Workers (GRP204, N=9)
- X. TACTICAL UNIT PERSONNEL (GRP109, N=78)
 - a. CONUS Tactical Unit Personnel (GRP277, N=11)
 - b. Overseas Tactical Unit Personnel (GRP457, N=6)
 - c. Tactical Unit Supervisors (GRP473, N=18)
 - d. Combat Communications Group Personnel (GRP381, N=6)
- XI. SATELLITE TCF PERSONNEL (GRP110, N=11)
- XII. AUTODIN SWITCHING CENTER PERSONNEL (GRP235, N=64)
 - a. AUTODIN Technical Controllers (GRP443, N=23)
 - b. Tactical and Combat Communications Personnel (GRP312, N=25)
 - c. AUTODIN Circuit Analysis Personnel (GRP312, N=25)
 - d. AUTODIN Administrative Personnel (GRP406, N=5)
- XIII. AUTOMATIC SECURE VOICE NETWORK PERSONNEL (GRP210, N=13)
- XIV. COMPUTER/MODEM CIRCUIT ANALYSIS PERSONNEL (GRP244, N=43)
 - a. Circuit Analysis Personnel (GRP331, N=27)
 - b. Computer Circuit Monitoring Personnel (GRP340, N=8)
 - c. Cryptographic Equipment Personnel (GRP287, N=8)

- XV. NETWORK CONTROLLERS (GRP196, N=6)
- XVI. AIR FORCE GLOBAL WEATHER CENTER (AFGWC) PATCH AND TEST PERSONNEL (GRP231, N=15)
- XVII. SATELLITE NETWORK CONTROLLERS (GRP150, N=8)
- XVIII. TELECOMMUNICATIONS SUPERVISORS (GRP096, N=121)
 - a. Operations NCOs (GRP467, N=29)
 - b. NCOICs, Technical Control (GRP501, N=14)
 - c. Security NCOs (GRP506, N=7)
 - d. Technical Training NCOs (GRP359, N=7)
 - e. NCOICs, Tactical Units (GRP313, N=5)
 - f. Superintendents, Technical Control (GRP193, N=18)
 - g. Staff Personnel (GRP132, N=19)
- XIX. FIRST-LINE SUPERVISORS (GRP116, N=12)
- XX. CIRCUIT ACTIONS MANAGERS (GRP071, N=20)
 - a. AUTODIN Switching Center Circuit Actions Personnel (GRP098, N=12)
 - b. Telecommunications Requirements Office Personnel (GRP075, N=8)
- XXI. STAFF ADMINISTRATIVE PERSONNEL (GRP079, N=13)
- XXII. STAFF QUALITY CONTROL PERSONNEL (GRP100, N=12)
- XXIII. QUALITY CONTROL NCOs (GRP101, N=13)
- XXIV. PERFORMANCE MONITOR PROGRAM (PMP) MANAGERS (GRP200, N=7)
- XXV. TRAINING NCOICs (GRP220, N=13)
- XXVI. RESIDENT COURSE INSTRUCTORS (GRP146, N=8)
- XXVII. CIRCUIT ANALYSIS NCOs (GRP108, N=5)
- XXVIII. NAVIGATIONAL AIDS COMMUNICATION MANAGEMENT OFFICE (NCMO) PERSONNEL (GRP077, N=45)
 - a. NCMO Job Controllers (GRP176, N=19)
 - b. NCMO Shift Supervisors (GRP181, N=10)
 - c. Junior NCMO Job Controllers (GRP121, N=8)

The respondents forming these clusters and independent job types account for 87 percent of the survey sample. The remaining 13 percent did not group with any of the clusters or independent job types described above. Some of the titles held by the personnel belonging to the remaining 13 percent include: Technical Controller, Shift Chief, Job Controller, Duty Controller, Group Quality Control, Systems NCO, and AUTOVON Coordinator. These personnel did not group with any cluster or job type because of either the unique job they performed or in the manner in which they perceived their job.



Overview

Generally, the career ladder is very heterogeneous, with a wide variety of jobs being performed by 307X0 personnel. However, these jobs can be loosely grouped together into two functional areas. These functional areas include:

I. CIRCUIT MONITORING AND ANALYSIS (Includes eight clusters and nine independent job types.)

II. SUPERVISION, TRAINING, AND ADMINISTRATION (Includes three clusters and eight independent job types.)

These functional areas are primarily differentiated due to the amount of time spent performing tasks and duties. Circuit Monitoring and Analysis personnel spend large amounts of time performing circuit monitoring or maintaining telecommunications services tasks, while Supervision, Training, and Administration personnel generally spend less than 15 percent of their job time on these same tasks. Supervision, Training, and Administration personnel generally perform less tasks, and spend very little time performing technical telecommunications tasks. Instead, these incumbents tend to be the supervisors or trainers of the career ladder, and concentrate on performing supervisory, training, or administrative tasks.

Brief descriptions of each cluster and independent job type are presented below. In addition, there are three types of tables at the end of this section that provide additional information about the clusters and independent job types. Tables 6 through 8 provide the relative percent time spent on each duty by the personnel in each of the groups identified. For example, Tactical Unit Personnel spend 25 percent of their job time erecting and maintaining tactical and combat communications equipment and facilities, while Satellite Network Controllers spend only two percent of their job time performing the same types of tasks. Tables 9 through 11 provide selected background information, such as DAFSC, work shifts, units presently assigned, or average months TAFMS. For example, Telecommunications Supervisors average 210 months TAFMS and 93 percent hold the 7-skill level or better. Tables 12 through 14 provide job satisfaction data for each major job group. These data suggest that the Satellite TCF Personnel are fairly dissatisfied with their job, with only nine percent of these incumbents finding their job interesting and only 27 percent plan to reenlist.

Also included in this report are two appendices concerning the Telecommunications Systems Control career ladder structure. Appendix A contains various duty, background, and job satisfaction information about the job types identified within each of the clusters found in the Telecommunications Systems Control career ladder, in addition to a brief job description for each of the job types identified. Appendix B lists common tasks performed by members for each of the clusters and independent job types identified in this section.

Circuit Monitoring and Analysis Functional Area

Sixty-nine percent of the 307X0 personnel sampled perform jobs which are included in this functional area. There are eight clusters and nine independent job types associated with this area, with most of the personnel spending at least 40 percent of their job time on circuit monitoring, wideband

performance monitoring, or maintaining telecommunications services tasks. Typical tasks performed by Circuit Monitoring and Analysis functional area personnel include:

- coordinate circuit or equipment problems with other technical controls or communications facilities
- patch equipment, lines, or channels
- analyze causes of digital circuit failures
- perform idle channel noise tests
- make digital circuit loop-backs
- analyze causes of audio circuit failures
- perform fault isolation on circuits using black digital patch bays
- make quality checks on standard test tone levels
- perform impulse noise tests
- make in-service or out-of-service quality checks on composite signal transmission levels

Even though a majority of the personnel in this functional area perform many of the same tasks, there are a wide variety of jobs being performed in this functional area. The type of facility worked at or the type of telecommunication circuits monitored seems to be the biggest differentiator between clusters and independent job types.

I. DEFENSE COMMUNICATIONS SERVICE (DCS) TECHNICAL CONTROL FACILITY (TCF) PERSONNEL (GRP323). This cluster of 255 respondents is the largest job group (20 percent of total sample) identified, with a majority of these respondents located overseas (75 percent). These incumbents work in DCS Technical Control Facilities and are responsible for insuring that the communication circuits and associated traffic are operating optimally. These incumbents spend 62 percent of their job time performing circuit monitoring and maintaining telecommunications service. Typical tasks for these incumbents include:

- make quality checks on standard test tone levels
- patch equipment, lines, or channels
- perform idle channel noise tests
- analyze causes of digital circuit failures
- make quality checks on teletypewriter printers

Overall, these incumbents perform a relatively large average number of tasks (86), and 89 percent hold the 3- or 5-skill level. A review of the job satisfaction data for DCS TCF personnel reveals these incumbents are fairly satisfied with their job, with 78 percent perceiving their job as interesting and 85 percent perceiving their training is being utilized at least fairly well or better.

II. SENIOR WIDEBAND AND AUTOVON SWITCHING PERSONNEL (GRP364). This cluster of 150 respondents are responsible for insuring wideband and AUTOVON circuits and equipment are operating correctly. Like the previous cluster, these incumbents also spend a majority of their job time performing circuit monitoring and maintaining telecommunications service, but are differentiated due to the fact that they perform these duties on wideband or AUTOVON circuits. Differentiating tasks for these incumbents include:

- perform quality assurance test of Automatic Voice Network (AUTOVON) circuits
- measure pilots at baseband levels
- operate secondary keyboards
- perform baseband sweeps
- calculate link idle channel noise (ICN) values

Background and job satisfaction data for these incumbents is fairly similar to the previous group of DCS TCF personnel. Eighty-five percent of these respondents hold the 3- or 5-skill level, 99 percent are located overseas, and 93 percent work rotating shifts. Job satisfaction data appears to be average, with 74 percent of these respondents finding their job interesting and 50 percent planning to reenlist.

III. WIDEBAND AND AUTOVON SWITCHING PERSONNEL (GRP273). The respondents in this cluster perform a job similar to Senior Wideband and AUTOVON Switching Personnel, but are more junior and perform a substantially lower number of tasks. These 55 incumbents spend a majority of their job time performing circuit monitoring and maintaining telecommunications service of wideband and AUTOVON circuits. Typical tasks for these incumbents include:

- perform baseband sweeps
- make link performance assessment (PA) or performance monitoring program (PMP) checks
- measure group pilot levels
- perform envelope delay distortion tests
- direct alternate routing of circuits

Ninety-six percent of these personnel hold the 3- or 5-skill level, and average 57 months TAFMS. Job satisfaction data appears to be lower than average, with only 38 percent of these incumbents planning to reenlist.

IV. CIRCUIT QUALITY CONTROL PERSONNEL (GRP260). Members of this small independent job type of six personnel all hold the 5- or 7-skill level. These respondents spend 42 percent of their job time on supervisory or administrative duties, and seem to be responsible for insuring the equipment at telecommunication facility is operating correctly. In addition, these respondents seem to maintain the paperwork involved with equipment that is functioning improperly. Typical tasks for these incumbents include:

- direct fault isolation or correction of circuit or system malfunctions
- direct quality checks of equipment after maintenance or installation
- maintain in-service or out-of-service quality control (QC) reports
- maintain trouble and restoration record forms (DD Form 1443)
- direct circuit or system checks

Although many of the tasks performed by these incumbents appear to be supervisory in nature, only 17 percent report actually supervising other personnel. Job satisfaction data for these incumbents are very good, with 100 percent perceiving their talents and training are utilized at least fairly well and 67 percent planning to reenlist.

V. NCOICs, QUALITY CONTROL (GRP369). The six respondents making up this independent job type seem to be responsible for directing the quality control programs at either DCS Technical Control Facilities or Wide-band and AUTOVON Switching Centers. Differentiating tasks for these respondents include:

- evaluate quality control programs
- plan quality assurance programs
- schedule equipment for PMEL servicing
- direct circuit or system checks
- maintain current parameter test data forms (DD Form 1697)

These personnel perform the second highest average number of tasks (98) and 83 percent work a day shift. All of these incumbents hold the 5- or 7-skill level, and 100 percent find their job interesting.

VI. MICROWAVE AND INDEPENDENT SIDEBAND PERSONNEL (GRP293). These six personnel spend 78 percent of their job time performing circuit monitoring and maintaining telecommunications service, but specialize by performing these functions on microwave and independent sideband systems. Typical tasks for these incumbents include:

- perform fault isolation on analog circuits
- make in-service or out-of-service quality checks on voice frequency carrier telegraph (VFCT) terminals
- make in-service or out-of-service quality checks on high frequency (HF) or independent sideband (ISB) systems
- manually switch automatic microwave allocations
- determine optimum operating frequency for high frequency (HF) communications

All of these respondents work at DCS Technical Control Facilities, and all work rotating shifts. These incumbents are fairly junior, with 67 percent holding the 3-skill level, and are fairly satisfied, with 100 percent finding their job interesting and 66 percent plan to reenlist.

VII. SHIFT SUPERVISORS (GRP203). These 23 respondents seem to be the first-line supervisors at various telecommunications facilities, with these respondents reporting spending 39 percent of their job time on supervisory duties. A review of the tasks performed reveals that many of the technical tasks involving telecommunications systems control are typically performed by these incumbents, and include:

- make equipment loop-backs
- perform idle channel noise tests
- direct circuit or systems checks
- supervise Telecommunications Systems Control Specialists/Attendants (AFSC 30750)
- prepare APRs

Ninety-six percent of these personnel are supervisors, and report having an average paygrade of E-5 or E-6. It is interesting to note that only 39 percent of these incumbents are stationed overseas, and 61 percent hold the 7-skill level.

VIII. INSTRUCTORS (GRP143). This cluster of 24 personnel seems to conduct two different phases of resident course classroom training. One job type demonstrates circuit monitoring techniques, while the other job type instructs wideband systems techniques. Typical tasks for the respondents in this cluster include:

- perform idle channel noise tests
- perform phase jitter tests
- perform baseband sweeps
- conduct resident course classroom training
- score tests

All of these incumbents hold the 5-skill level or better, and 63 percent work a day shift. Job satisfaction data reveals these incumbents are very satisfied with their job, with 92 percent perceiving their talents and training are being utilized at least fairly well or better, and 71 percent plan to reenlist.

IX. CIRCUIT ACTIONS NCOs (GRP147). This fairly large cluster of 98 respondents perform the highest average number of tasks (145) of all clusters and independent job types. These respondents spend roughly equal amounts of job time supervising and performing circuit monitoring and maintaining telecommunications service. These personnel seem to be responsible for directing floor operations at telecommunications facilities, and insuring that communications and associated equipment remain operational. Typical tasks performed by these respondents include:

- direct labeling of patch bays
- conduct acceptance testing of new systems, circuits, or equipment
- maintain circuit history folders
- direct wiring of cross connections on distribution frames
- establish changes in circuits or channels

Circuit Actions NCOs average 125 months TAFMS, and 69 percent are working a day shift. These incumbents have average job satisfaction indices, with 81 percent finding their job interesting and 53 percent planning to reenlist.

X. TACTICAL UNIT PERSONNEL (GRP109). Fifty-one percent of the 78 personnel in this cluster are assigned to tactical units. These incumbents spend 25 percent of their job time erecting and maintaining tactical and combat communications equipment and facilities, and are responsible for insuring that communication circuits used by mobile tactical units are operational. Typical tasks for these respondents include:

- load or unload mobile communications equipment
- change frequencies on radio systems
- camouflage mobile sites
- check continuity between local and distant technical controls
- adjust line amplifiers

Tactical Unit Personnel perform an average of 91 tasks and all hold the 3-, 5-, or 7-skill level. These incumbents have relatively low job satisfaction indicators, with only 55 percent finding their job interesting and only 35 percent planning to reenlist.

XI. SATELLITE TCF PERSONNEL (GRP110). A majority of these eleven respondents work at the Satellite Technical Control Facility located at Elmendorf AFB AK and spend 22 percent of their job time performing wide-band systems performance monitoring. These respondents are responsible for insuring satellite communications circuits are operating correctly. Typical tasks for these personnel include:

- perform baseband loading (BBL) measurements
- make in-service or out-of-service quality checks on composite signal transmission levels
- perform impulse noise tests
- measure group pilot levels
- perform selective voltmeter noise (SVN) slot measurements

These incumbents average 63 months TAFMS, and 73 percent hold the 5-skill level. They perform on the average only 38 tasks. A review of these incumbents' job satisfaction data reveals low satisfaction indicators, with only nine percent finding their job interesting and only 27 percent planning to reenlist.

XII. AUTODIN SWITCHING CENTER PERSONNEL (GRP235). Sixty-four percent of the 64 personnel found in this group are working in AUTODIN Switching Centers. These personnel are responsible for insuring that AUTODIN switching circuits and associated equipment are operating correctly. Typical tasks for these incumbents include:

- make digital loop-backs
- coordinate cryptographic synchronizations
- perform fault isolation on AUTODIN switching center equipment
- make quality checks on teletypewriter printers
- perform fault isolation on circuits using black digital patch bays

Eighty-eight percent of these respondents hold the 3- or 5-skill level, and 45 percent are in their first enlistment. Job satisfaction indicators appear fair for these incumbents, with 69 percent finding their job interesting and 34 percent planning to reenlist.

XIII. AUTOMATIC SECURE VOICE NETWORK PERSONNEL (GRP210). These junior 3- and 5-skill level personnel work primarily at DCS Technical Control Facilities, and perform circuit monitoring and maintain telecommunications service on Automatic Secure Voice Network Communications equipment. Typical tasks for these 13 respondents include:

- make equipment loop-backs
- make digital circuit loop-backs
- perform fault isolation on circuits using red digital patch bays
- perform operator maintenance on teletypewriters, such as changing ribbons or replacing paper
- make audio channel loop-backs

It is interesting to note that only 23 percent of these incumbents are assigned to overseas locations and have an average of only 29 months TAFMS. These personnel also have relatively low job satisfaction indicators, with only 46 percent finding their job interesting and only 23 percent planning to reenlist.

XIV. COMPUTER/MODEM CIRCUIT ANALYSIS PERSONNEL (GRP244).

The 43 personnel in this cluster are differentiated due to the fact that they spend 72 percent of their job time performing circuit monitoring and maintaining telecommunications service, but perform these functions on circuits involving computers and modems. Typical tasks include:

- perform fault isolation on circuits using black digital patch bays
- make digital circuit loop-backs
- make equipment loop-backs
- coordinate cryptographic synchronizations
- perform bit error rate tests on digital circuits

Sixty-five percent of these incumbents work rotating shifts, and only 28 percent are stationed overseas. Eighty-four percent hold the 5- or 7-skill level and average 65 months TAFMS.

XV. NETWORK CONTROLLERS (GRP196).

A majority of the six personnel identified in this independent job type are located at the Air Force Manpower Personnel Center (AFMPC), and seem to be responsible for insuring the communications circuits between the AFMPC personnel computer and the personnel computers located at other bases are operating correctly. These incumbents spend 65 percent of their job time performing circuit monitoring and maintaining telecommunications service, and typical tasks include:

- perform bit error rate tests on digital circuits
- make in-service or out-of-service quality checks on digital data modems
- perform bit error rate tests on time division multiplexing (TDM) equipment
- make in-service or out-of-service quality checks on data terminals
- dispatch maintenance specialists or equipment

These incumbents all hold the 5- or 7-skill level, and 100 percent find their job interesting. However, even though these personnel have high job interest, only 33 percent plan to reenlist.

XVI. AIR FORCE GLOBAL WEATHER CENTER (AFGWC) PATCH AND

TEST PERSONNEL (GRP231). A majority of the five incumbents identified in this independent job type are working at the AFGWC located at Offutt AFB NE. These respondents are responsible for insuring good weather information transmissions to and from the AFGWC. Typical tasks performed by these incumbents include:

- make in-service or out-of-service quality checks on composite signal transmission levels
- perform fault isolation on facsimile transmission equipment
- isolate circuit or system malfunctions
- perform amplitude versus frequency tests (frequency response tests)
- make in-service or out-of service quality checks on digital data modems

These respondents are relatively junior, with all holding the 3- or 5-skill level and averaging 32 months TAFMS. In addition, although 100 percent of these respondents find their job interesting, only 20 percent plan to reenlist.

XVII. SATELLITE NETWORK CONTROLLERS (GRP150). All eight of these personnel work at a Defense Communications Agency unit, have an average paygrade of E-6, and all hold the 5-skill level. These personnel perform both supervisory and technical tasks, and seem to be responsible for insuring satellite communications systems are operating correctly. Differentiating tasks performed by these incumbents include:

- perform operational checks of satellite communications systems
- use Automatic Secure Voice Communications (AUTOSEVOCOMM)
- perform cryptographic synchronizations
- implement telecommunications contingency plans
- coordinate operational changes to circuits or channels with users or Defense Communications Agency (DCA)

All of these incumbents are stationed overseas, and only 62 percent find their job interesting. However, 87 percent perceive their job utilizes their talents and training at least fairly well and 100 percent plan to reenlist.

Supervision, Training, and Administration Functional Area

Twenty-four percent of the total 307X0 sample fall into jobs associated with this functional area. These respondents grouped together due to large amounts of time spent performing nontechnical telecommunications tasks. Typical tasks performed by these incumbents include:

- write correspondence
- prepare APRs
- supervise Telecommunications Systems Control Specialists/Attendants (AFSC 30750)
- maintain circuit history folders
- plan briefings
- inspect communications facilities
- evaluate compliance with performance standards
- counsel trainees on training progress
- demonstrate how to locate technical information
- prepare NCMO briefings

There are three clusters and eight independent job types associated with this functional area. Generally, these incumbents are differentiated by the amount of time spent performing supervisory or administrative tasks, and whether or not they report supervising anyone. For example, even though Staff Quality Control Personnel spend approximately 90 percent of their job time performing supervisory or administrative tasks, only eight percent report supervising anyone. Overall, the personnel in this functional area have a higher average paygrade, higher average TAFMS, and perform somewhat fewer tasks than the personnel identified in the Circuit Monitoring and Analysis functional area.

XVIII. TELECOMMUNICATIONS SUPERVISORS (GRP096). This relatively large cluster of 121 senior NCOs are the supervisors and managers of the Telecommunications Systems Control career ladder. These incumbents spend 74 percent of their job time on supervisory duties, and 77 percent report supervising. Typical tasks for these incumbents include:

- prepare APRs
- determine work priorities
- determine requirements for space, personnel, equipment, or supplies
- develop work methods or procedures
- supervise Telecommunications Systems Control Technicians (AFSC 30770)

These respondents average 210 months TAFMS, have an average pay-grade of E-7, and 84 percent work a day shift. Job satisfaction indicators for these personnel appear average, with 80 percent finding their job interesting and 53 percent planning to reenlist.

XIX. FIRST-LINE SUPERVISORS (GRP116). This independent job type of 12 individuals perform a job somewhat similar to Telecommunications Supervisors, in the fact that both job groups spend approximately 70 percent of their job time on supervisory duties. However, First-Line Supervisors are more junior (averaging 121 months TAFMS and all holding the 5- or 7-skill level) and are more involved with the training of their subordinates. Typical tasks performed by these personnel include;

- supervise Telecommunications Systems Control Specialists/Attendants (AFSC 30750)
- conduct OJT
- direct circuit or system checks
- establish performance standards for subordinates
- counsel trainees on training progress

It is interesting to note that only 51 percent of these respondents perceive their job as interesting, but 83 percent plan to reenlist.

XX. CIRCUIT ACTIONS MANAGERS (GRP071). The 20 personnel identified in this cluster are differentiated due to the large amount of time spent (30 percent) performing administrative functions. These personnel seem responsible for maintaining and preparing the administrative files found at telecommunications facilities. Tasks performed by a majority of these personnel include:

- maintain circuit history folders
- prepare in-effect reports
- prepare delayed service reports
- maintain Defense Communication System (DCS) data bases
- direct compliance with service orders

Eighty-five percent of these personnel are working a day shift, and 90 percent find their job interesting.

XXI. STAFF ADMINISTRATIVE PERSONNEL (GRP079). These incumbents spend 58 percent of their job time directing and implementing or performing administrative functions. These personnel perform very few technical telecommunications systems tasks, and seem to perform a staff advisory role. Typical tasks for these 13 personnel include:

- draft reports
- write staff studies, surveys, or special reports
- participate in staff meetings
- plan briefings
- visit communications facilities for familiarization

All of these personnel work a day shift and all hold the 7- or 9-skill level. These incumbents are less satisfied with their job than most of the personnel in other major job groups, with only 46 percent of Staff Administrative Personnel perceiving their job utilizes their training at least fairly well and only 46 percent planning to reenlist.

XXII. STAFF QUALITY CONTROL PERSONNEL (GRP100). These 12 respondents seem to be responsible for finding ways to improve telecommunication services at various facilities and also for coordinating special communications requirements with users. These incumbents spend less than 10 percent of their job time performing technical duties, and typical tasks include:

- draft recommendations for system improvements
- coordinate special communications requirements for users or DCA
- inspect communications facilities
- develop plans to inform communications circuit users of changes in circuit configurations
- evaluate suggestions

The average number of tasks performed by these senior incumbents (average paygrade E-7) is rather low (20). However, these personnel appear to be rather satisfied with their job, with 75 percent planning to reenlist and 83 percent finding their job interesting.

XXIII. QUALITY CONTROL NCOs (GRP101). Sixty-two percent of the 13 incumbents identified in this independent job group are working at a DCA Technical Control Facility. These respondents seem to be responsible for directing facility quality control programs. Like the above major job group, these incumbents spend little job time performing technical telecommunications duties. Many of the typical tasks these incumbents perform are supervisory or administrative in nature, and include:

- direct quality control programs
- maintain circuit parameter test data forms (DD Form 1697)
- maintain trend analysis files
- schedule equipment for PMEL servicing
- plan quality assurance programs

Ninety-two percent of these incumbents hold the 5- or 7-skill level, and average 82 months TAFMS. These incumbents appear to be rather satisfied with their job, with 84 percent finding their job interesting and perceiving their job utilizes their training fairly well. However, only 31 percent of these respondents plan to reenlist.

XXIV. PERFORMANCE MONITOR PROGRAM (PMP) MANAGERS (GRP200). A majority of the personnel assigned to this independent job type are working at Wideband Technical Control Facilities and are responsible for maintaining and compiling performance data for wideband communications and associated equipment. These incumbents spend approximately 45 percent of their job time performing administrative and wideband systems performance monitoring tasks, such as:

- maintain trend analysis files
- direct development or maintenance of status boards, graphs, or charts
- prevent system outages or degradation using performance monitoring data
- evaluate compliance with performance standards
- maintain performance monitoring graphs or charts

All seven of these personnel are stationed overseas, and perform a small average number of tasks (28). These respondents seem fairly satisfied with their job, with 86 percent perceiving their job as interesting and 71 percent planning to reenlist.

XXV. TRAINING NCOICs (GRP220). These 13 incumbents grouped together due to the large amount of time they spend performing tasks related to OJT. None of these respondents are working at a resident technical school, yet they spend 61 percent of their job time performing training related tasks. Typical tasks performed by a majority of these respondents include:

- maintain training records, charts, or graphs
- administer tests
- evaluate OJT trainees
- determine OJT training requirements
- develop Job Proficiency Guides (JPGs)

Only eight percent of these respondents report supervising anyone, yet 38 percent hold the 7-skill level and 92 percent work a day shift. Job satisfaction indicators appear good, with 85 percent of these individuals finding their job interesting and 61 percent planning to reenlist.

XXVI. RESIDENT COURSE INSTRUCTORS (GRP146). All eight of these respondents are working at Keesler AFB MS and are responsible for conducting resident course classroom training. These personnel are similar to the Instructors cluster discussed earlier, but perceive their job as being primarily training oriented (67 percent of job time) rather than primarily involving circuit monitoring or wideband performance monitoring. Typical tasks for these respondents include:

- conduct resident course classroom training
- rate progress of individuals in training
- score tests
- demonstrate how to locate technical information
- develop resident course or Career Development Course (CDC)
- curriculum materials

All of these incumbents hold the 5-skill level and perform a lower average number of tasks (31). These incumbents are fairly dissatisfied with their job, with only 47 percent perceiving their job as interesting and 37 percent planning to reenlist.

XXVII. CIRCUIT ANALYSIS NCOs (GRP108). These five respondents spend a majority of their job time performing administrative and circuit monitoring and analysis functions. These incumbents seem to be concerned with annotating and maintaining trend analysis and related files. Typical tasks for these incumbents include:

- analyze causes of audio circuit failures
- analyze causes of digital circuit failures
- maintain circuit efficiency reports
- maintain trend analysis files
- maintain technical control communications work order forms
(DD Form 1445)

These incumbents are not very satisfied with their job, with only 40 percent perceiving their job as interesting and only 40 percent planning to reenlist.

XXVIII. NAVIGATIONAL AIDS COMMUNICATION MANAGEMENT OFFICE (NCMO) PERSONNEL (GRP077). This cluster of 45 respondents are responsible for performing a coordinating or dispatching role at telecommunications facilities. When 307X0 personnel detect a problem in a circuit or a user has problems with a circuit, the problems are forwarded to NCMO Personnel, who then contact the proper maintenance personnel to correct the problem. These personnel spend 50 percent of their job time performing administrative functions, and typical tasks include:

- maintain mission impairment reports
- prepare NCMO briefings
- notify communications support facilities of severe weather warning calls
- coordinate requests for maintenance assistance
- dispatch maintenance specialists or equipment

These incumbents perform an average of only 29 tasks and are among the most dissatisfied of all incumbents identified in the major job groups discussed above, with only 29 percent finding their job interesting, 27 percent perceiving their talents and training are utilized at least fairly well, and 42 percent planning to reenlist.

Summary

The Telecommunications Systems Control specialty is basically divided into two functional areas, which include Circuit Monitoring and Analysis and Supervision, Training, and Administration. These functional areas are relatively heterogeneous, with the tasks performed by the personnel in one functional area being performed relatively infrequently by personnel in the other functional area.

A review of job interest and related data suggests that job satisfaction varies little between functional areas, but varies considerably for major job groups identified within functional areas. In the Circuit Monitoring and Analysis functional area, Tactical Unit Personnel, Satellite TCF Personnel, and Automatic Secure Voice Network Personnel all have fairly low job satisfaction indicators. In the Supervision, Training, and Administrative functional area, Staff Administrative Personnel, Circuit Analysis NCOs, and NCMO Personnel have low overall job satisfaction indicators. NCMO Personnel seem to be the most dissatisfied of all 28 major job groups identified, with only 29 percent finding their job interesting and only 27 percent perceive their job as utilizing their talents and training at least fairly well.

TABLE 6
RELATIVE PERCENT TIME SPENT ON DUTIES BY CLUSTERS AND INDEPENDENT JOB TYPES

DUTIES	DCS TECHNICAL AND CONTROL FACILITY PERSONNEL (GRP323, N=255)	SENIOR WIDEAND AND AUTOVON SWITCH PERSONNEL (GRP364, N=150)	WIDEAND AND AUTOVON PERSONNEL (GRP273, N=55)	CIRCUIT QUALITY CONTROL PERSONNEL (GRP260, N=6)	NGOICs QUALITY CONTROL PERSONNEL (GRP369, N=6)	MICROWAVE AND INDEF SIDE-BAND PERSONNEL SUPV (GRP293, N=6)	IN-IR (GRP147, N=24)	CIRCUIT ACTIONS NOIS (GRP147, N=68)	TACTICAL UNIT PERSONNEL (GRP109, N=78)	SATELLITE TCF PERSONNEL (GRP110, N=11)
ORGANIZING AND PLANNING	1	1	*	2	6	*	2	8	3	1
DIRECTING AND IMPLEMENTING	5	4	3	16	12	1	5	19	9	6
INSPECTING AND EVALUATING	1	1	*	3	4	*	2	5	2	1
TRAINING	3	3	1	3	2	*	9	7	4	1
PERFORMING ADMINISTRATIVE FUNCTIONS	9	8	8	18	14	4	2	16	4	4
PERFORMING CIRCUIT MONITORING AND ANALYSIS	34	39	37	20	31	35	51	17	17	17
PERFORMING WIDEAND SYSTEMS PERFORMANCE MONITORING AND ANALYSIS	8	13	19	4	6	6	13	5	1	22
MAINTAINING TELECOMMUNICATIONS SERVICE	28	21	23	27	14	43	10	14	21	11
ERECTING AND MAINTAINING TACTICAL AND COMBAT COMMUNICATIONS EQUIPMENT AND FACILITIES	4	4	2	5	2	4	*	3	25	4
PERFORMING GENERAL TELECOMMUNICATIONS FUNCTIONS	5	4	5	3	9	6	4	6	11	7

*DENOTES LESS THAN ONE PERCENT

TABLE 7

RELATIVE PERCENT TIME SPENT ON DUTIES BY CLUSTERS AND INDEPENDENT JOB TYPES

DUTIES	AUTODIN SWITCHING CENTER PERSONNEL (GRP235, N=64)	AUTOMATIC SECURE VOICE NETWORK PERSONNEL (GRP210, N=13)	COMPUTER/MODEM CIRCUIT ANALYSIS PERSONNEL (GRP244, N=43)	NETWORK CONTROLLERS (GRP196, N=5)	AFGHC PATCH TEST PERSONNEL (GRP231, N=5)	SATELLITE NETWORK CONTROLLERS (GRP150, N=8)
ORGANIZING AND PLANNING	*	*	*	*	*	*
DIRECTING AND IMPLEMENTING	6	3	5	3	5	19
INSPECTING AND EVALUATING			1		1	1
TRAINING	2	1	2	*	4	*
PERFORMING ADMINISTRATIVE FUNCTIONS	12	26	6	5	8	18
PERFORMING CIRCUIT MONITORING AND ANALYSIS	21	14	36	25	38	11
PERFORMING WIDEBAND SYSTEMS PERFORMANCE MONITORING AND ANALYSIS	*	1	1	4	1	3
MAINTAINING TELECOMMUNICATIONS SERVICE	48	43	38	33	27	34
ERECTING AND MAINTAINING TACTICAL AND COMBAT COMMUNICATIONS EQUIPMENT AND FACILITIES	5	2	2	13	5	2
PERFORMING GENERAL TELECOMMUNICATIONS FUNCTIONS	5	8	9	15	11	11

*DENOTES LESS THAN ONE PERCENT

TABLE 8
RELATIVE TIME SPENT ON DUTIES BY CLUSTERS AND INDEPENDENT JOB TYPES

DUTIES	TELECOMM SUPV (GRP096, N=121)	FIRST- LINE SUPV (GRP116, N=12)	CIRCUIT ACTIONS MANAGERS (GRP071, N=20)	STAFF ADMIN PERSONNEL (GRP079, N=13)	STAFF QUALITY CONTROL PERSONNEL (GRP100, N=12)	STAFF QUALITY CONTROL NCOs (GRP101, N=13)	PERFORMANCE MONITOR PROGRAM MANAGERS (GRP200, N=7)	TRAINING NCOs (GRP220, N=13)	RESIDENT COURSE INST (GRP146, N=8)	CIRCUIT ANALYSIS NCOs (GRP108, N=5)	NCHO PERSONNEL (GRP077, N=45)
ORGANIZING AND PLANNING	19	13	11	19	26	9	8	10	5	4	5
DIRECTING AND PLANNING	19	31	32	33	(40)	19	27	11	6	18	13
INSPECTING AND EVALUATING	15	6	5	15	17	5	8	4	1	4	3
TRAINING	11	21	6	3	1	4	1	(61)	(67)	1	5
PERFORMING ADMINISTRATIVE FUNCTIONS	14	16	30	25	9	28	26	6	3	30	(50)
PERFORMING CIRCUIT MONITORING AND ANALYSIS	2	4	3	*	*	16	3	2	6	26	1
PERFORMING WIDEBAND SYSTEMS PERFORMANCE MONITORING AND ANALYSIS	1	2	*	*	*	4	19	1	2	2	*
MAINTAINING TELECOMMUNICATIONS SERVICE	2	4	6		1	6	2		2	10	2
ERECTING AND MAINTAINING TACTICAL AND COMBAT COMMUNICATIONS EQUIPMENT AND FACILITIES	1	1	1	*	*	*	1	*	*	*	*
PERFORMING GENERAL TELECOMMUNICATIONS FUNCTIONS	6	3	7	5	5	10	5	4	7	6	(21)

*DENOTES LESS THAN ONE PERCENT

TABLE 9

BACKGROUND INFORMATION FOR CLUSTERS AND INDEPENDENT JOB TYPES

	DCS TECHNICAL FACILITY PERSONNEL		SENIOR WIDEBAND AND AUTOVON SWITCHING PERSONNEL		WIDEBAND AND AUTOVON SWITCHING PERSONNEL		CIRCUIT QUALITY CONTROL PERSONNEL		NCOs QUALITY CONTROL PERSONNEL		MICROWAVE AND INDEP SIDEBAND PERSONNEL		SHIFT SUPV		INSTR NCOs		TACTICAL UNIT PERSONNEL		SATELLITE TCF PERSONNEL	
	PERSONNEL		PERSONNEL		PERSONNEL		PERSONNEL		PERSONNEL		PERSONNEL		PERSONNEL		PERSONNEL		PERSONNEL		PERSONNEL	
AVERAGE NUMBER OF TASKS PERFORMED:	86		83		49		64		98		41		76		48		91		38	
AVERAGE PAYGRADE:	E-4		E-4		E-4		E-4		E-5		E-4		E-5		E-5		E-4, E-5		E-4	
PERCENT SUPERVISING:	30%		32%		4%		17%		17%		-		96%		8%		39%		27%	
DAFSC:																				
30730	14%		14%		22%		-		-		67%		-		-		12%		18%	
30750	75%		71%		74%		83%		83%		17%		39%		58%		67%		73%	
30770	11%		15%		4%		17%		17%		16%		61%		37%		21%		9%	
30790	-		-		-		-		-		-		-		5%		-		-	
CEM CODE 30700	-		-		-		-		-		-		-		-		-		-	
AVERAGE MONTHS TAFMS:	64		66		57		75		80		55		122		111		84		63	
PERCENT IN FIRST ENLISTMENT:	49%		46%		64%		17%		17%		67%		39%		12%		33%		64%	
PERCENT ASSIGNED OVERSEAS:	75%		99%		78%		67%		100%		67%		75%		42%		36%		100%	
UNIT PRESENTLY ASSIGNED:																				
AUTODIN SWITCHING CENTER	-		1%		-		-		-		-		4%		-		-		-	
DEFENSE COMMUNICATIONS AGENCY (DCA)	-		-		-		-		-		-		-		-		-		-	
DCS TECHNICAL CONTROL FACILITY	78%		13%		46%		33%		33%		100%		57%		4%		-		18%	
MANPOWER PERSONNEL CENTER (MPC)	-		-		-		-		-		-		-		-		-		-	
NCMO	-		-		-		-		-		-		-		-		-		-	
RESIDENT TECHNICAL SCHOOL	-		-		4%		-		-		-		-		-		-		-	
SATELLITE TECHNICAL CONTROL FACILITY	1%		1%		9%		-		-		-		4%		42%		-		64%	
TACTICAL UNIT	-		1%		-		-		-		-		-		-		51%		-	
WIDEBAND AND AUTOVON TECHNICAL CONTROL FACILITY	3%		76%		13%		-		67%		-		-		8%		-		-	
WORK SHIFT:																				
DAY SHIFT	5%		1%		9%		17%		83%		-		9%		63%		53%		9%	
ROTATING SHIFTS	78%		93%		54%		33%		-		100%		70%		25%		3%		89%	

TABLE 10
BACKGROUND INFORMATION DATA FOR CLUSTERS AND INDEPENDENT JOB TYPES

	AUTODIN SWITCHING CENTER PERSONNEL	AUTOMATIC SECURE VOICE NETWORK PERSONNEL	COMPUTER/MODEM CIRCUIT ANALYSIS PERSONNEL	NETWORK CONTROLLERS	AFCWC PATCH AND TEST PERSONNEL	SATELLITE NETWORK CONTROLLERS
AVERAGE NUMBER OF TASKS PERFORMED:	30	34	39	28	27	42
AVERAGE PAYGRADE:	E-4	E-3	E-4	E-5	E-3, E-4	E-6
PERCENT SUPERVISING:	27%	23%	9%	-	40%	-
DAFSC:						
30730	16%	39%	16%	-	20%	-
30750	72%	61%	70%	80%	80%	100%
30770	12%	-	14%	20%	-	-
30790	-	-	-	-	-	-
CEM CODE 30700	-	-	-	-	-	-
AVERAGE MONTHS TAFTS:	66	29	65	77	32	160
PERCENT IN FIRST ENLISTMENT:	45%	84%	47%	-	60%	-
PERCENT ASSIGNED OVERSEAS:	33%	23%	28%	-	-	100%
UNIT PRESENTLY ASSIGNED:						
AUTODIN SWITCHING CENTER	64%	-	-	-	-	-
DEFENSE COMMUNICATIONS AGENCY (DCA)	-	-	-	-	-	100%
DCS TECHNICAL CONTROL FACILITY	8%	39%	35%	-	20%	-
MANPOWER PERSONNEL CENTER (MPC)	-	-	-	67%	-	-
NCMO	-	-	-	-	-	-
RESIDENT TECHNICAL SCHOOL	-	-	-	-	-	-
SATELLITE TECHNICAL CONTROL FACILITY	2%	15%	9%	-	-	-
TACTICAL UNIT	-	-	-	-	-	-
WIDEAREA AND AUTOVON TECHNICAL CONTROL FACILITY	-	-	-	-	-	-
WORK SHIFT:						
DAY SHIFT	17%	8%	12%	83%	20%	-
ROTATING SHIFTS	48%	39%	65%	-	60%	75%

TABLE 11
BACKGROUND INFORMATION FOR CLUSTERS AND INDEPENDENT JOB TYPES

	TELECOMM SUPV		FIRST-LINE SUPERVISOR		CIRCUIT ACTIONS MANAGERS		STAFF QUALITY CONTROL PERSONNEL		PERFORMANCE MONITOR PROGRAM MANAGERS		TRAINING COURSE INST		CIRCUIT ANALYSIS NCOs		NCO PERSONNEL	
	74	E-7	41	E-5, E-6	39	E-5	20	E-7	28	E-5	33	E-5	16	E-5	29	E-4, E-5
AVERAGE NUMBER OF TASKS PERFORMED:	77%	77%	100%	35%	35%	35%	8%	8%	57%	57%	8%	8%	20%	20%	36%	36%
AVERAGE PAYGRADE:																
PERCENT SUPERVISING:																
DAFSC:																
30730																
30750																
30770																
30790																
CEM CODE 30700																
AVERAGE MONTHS TAFTS:	210	121	120	65%	65%	65%	214	8%	101	14%	127	89	96	8%	8%	8%
PERCENT IN FIRST ENLISTMENT:	17%	67%	65%	65%	65%	65%	8%	8%	14%	14%	62%	13%	20%	20%	38%	38%
PERCENT ASSIGNED OVERSEAS:	65%	67%	65%	65%	65%	65%	67%	67%	100%	100%	62%	13%	80%	80%	33%	33%
UNIT PRESENTLY ASSIGNED:																
AUTODIN SWITCHING CENTER	4%	8%	20%								8%		40%			
DEFENSE COMMUNICATIONS AGENCY (DCA)	3%			23%			17%									
D-5 TECHNICAL CONTROL FACILITY	30%	17%	15%				62%				39%		60%			
MANPOWER PERSONNEL CENTER (MPC)											15%					
NCO	7%	17%														
RESIDENT TECHNICAL SCHOOL	2%											100%				
SATELLITE TECHNICAL CONTROL FACILITY	5%															
TACTICAL UNIT	6%		10%				8%									
WIDEAREA AND AUTOVON TECHNICAL CONTROL FACILITY	12%	17%	15%				15%				15%					
WORK SHIFT:																
DAY SHIFT	84%	33%	85%	100%	100%	100%	100%		86%		47%	52%	81%			
ROTATING SHIFTS	1%	42%									47%	47%				

TABLE 12
JOB SATISFACTION DATA FOR CLUSTERS AND INDEPENDENT JOB TYPES
(PERCENT MEMBERS RESPONDING)

	DCS TECHNICAL CONTROL FACILITY PERSONNEL	SENIOR WIDEBAND AND AUTOVON SWITCHING PERSONNEL	WIDEBAND AND AUTOVON SWITCHING PERSONNEL	CIRCUIT QUALITY CONTROL PERSONNEL	NCICs QUALITY CONTROL	MICROWAVE AND INDEP SIDEBAND PERSONNEL	SHIFT SUPV	INSTR	CIRCUIT ACTIONS NCICs	TACTICAL UNIT PERSONNEL	SATELLITE TCF PERSONNEL
I FIND MY JOB:											
NO RESPONSE	1	1	-	-	-	-	-	-	1	-	-
DULL	7	8	15	17	-	-	9	8	6	18	45
SO-SO	14	17	13	-	-	-	12	4	12	27	46
INTERESTING	78	74	72	83	100	100	79	88	81	(55)	(9)
MY JOB UTILIZES MY TALENTS:											
NO RESPONSE	-	1	-	-	-	-	-	-	-	-	-
NOT AT ALL TO VERY LITTLE	16	23	18	-	-	17	30	8	15	37	64
FAIRLY WELL OR BETTER	84	76	82	100	100	83	70	92	84	63	(36)
MY JOB UTILIZES MY TRAINING:											
NO RESPONSE	-	1	-	-	-	-	4	-	-	-	-
NOT AT ALL TO VERY LITTLE	15	13	29	-	-	-	30	8	14	50	74
FAIRLY WELL OR BETTER	85	86	71	100	100	100	66	92	81	(50)	(2)
I PLAN TO REENLIST:											
NO RESPONSE	-	2	2	-	-	-	-	-	-	1	-
NO OR PROBABLY NO	57	48	60	33	34	34	48	29	45	64	73
YES OR PROBABLY YES	43	50	(38)	67	66	66	52	71	-	(35)	(2)

TABLE 13

JOB SATISFACTION DATA FOR CLUSTERS AND INDEPENDENT JOB TYPES
(PERCENT MEMBERS RESPONDING)

	AUTOMATION SWITCHING CENTER PERSONNEL	AUTOMATIC SECURE VOICE NETWORK PERSONNEL	COMPUTER/MODEM CIRCUIT ANALYSIS PERSONNEL	NETWORK CONTROLLERS	AFGW/PAUCH AND TES PERSONNEL	SATELLITE NETWORK CONTROLLERS
I FIND MY JOB						
NO RESPONSE	11	31	1	-	-	-
DULL	20	24	3	-	-	13
SO-SO	69	45	83	100	100	25
INTERESTING						62
MY JOB UTILIZES MY TALENTS						
NO RESPONSE	52	61	7	-	-	-
NOT AT ALL UTILIZED				7	40	13
FAIRLY WELL UTILIZED			94	83	60	87
MY JOB UTILIZES MY TRAINING						
NO RESPONSE	52	61	7	-	-	-
NOT AT ALL UTILIZED				7	40	13
FAIRLY WELL UTILIZED			94	83	60	87
I PLAN TO REENLIST						
NO RESPONSE	52	61	7	-	-	-
NO PROBLEM	43	45	83	100	100	100
YES, NO PROBLEM						

ANALYSIS OF DAFSC GROUPS

An analysis of DAFSC groups forms a part of each occupational analysis. The DAFSC analysis helps to identify differences among skill level groups within the 307X0 specialty. It also aids in the analysis of career ladder documents, such as AFR 39-1 Specialty Descriptions and the Specialty Training Standard (STS).

The DAFSC analysis of the 307X0 specialty will discuss the duties and tasks common to the DAFSC groups, as well as discussing the tasks which best differentiate the 3-, 5-, 7-, 9-skill level and CEM Code 30700 incumbents.

Skill level Comparisons

As in many career ladders, the job performed by 3- and 5-skill level respondents is essentially the same. This job is primarily technical in nature, with 30730/50 personnel spending 70 percent of their job time on technical duties. It is important to note that one duty, performing circuit monitoring and analysis, makes up 27 percent of the 3- and 5-skill level incumbents' job time (see Table 15). This is realistic with the career ladder structure, since most 30730/50 personnel fall within the clusters or the independent job types which are primarily technical in nature (see Table 16). Table 17 lists those tasks which are performed by the highest percentages of 30730/50 personnel. These tasks primarily involve performing circuit monitoring or maintaining telecommunications services, and include making audio channel loop-backs, patching equipment, lines, or channels, performing idle channel noise tests, and making quality checks on standard test tone levels.

At the 7-skill level, Table 15 reveals the percentage of time spent on duties changes somewhat, with considerably less time spent on technical duties and more time (48 percent) on supervisory duties. These trends are again reflected in the tasks performed by the highest percentages of 30770 personnel, with Table 18 revealing supervisory and administrative tasks are performed by the greatest percentages of 7-skill level personnel. These supervisory or administrative tasks include preparing APRs, typing forms, supervising Telecommunications Systems Control Specialists (AFSC 30750), or developing work methods or procedures. DAFSC 30770 personnel seem to be first-line supervisors, with many of the supervisory tasks performed by these personnel requiring a high level of technical expertise or knowledge of telecommunications systems. Examples of these tasks requiring high levels of technical telecommunications systems experience include directing circuits or systems checks or directing fault isolation of circuit malfunctions.

In a comparison of the duties and tasks performed by 3- or 5- and 7-skill level personnel, Table 19 reveals that technical tasks involving circuit monitoring or maintaining telecommunications services, such as making audio channel loopbacks, making on-call patches, performing amplitude versus frequency tests, or patching equipment, lines, or channels are more indicative of 3- or 5-skill level personnel. As expected, Table 19 reveals that supervisory tasks, such as preparing APRs, scheduling leaves or

passes, or assigning personnel to duty positions, are performed by higher percentages of 30770 personnel. The differences in the types of tasks performed are also reflected in Table 15, with 30730/50 personnel spending only 17 percent of their job time on supervisory related tasks, while 7-skill level incumbents spend 48 percent of their job time performing the same type tasks.

An analysis of the tasks performed by 9-skill level and CEM Code 30700 personnel reveals both of these groups are performing the same types of tasks. Table 20 reveals that all of the tasks performed by 30790/00 personnel are either supervisory or administrative in nature, and include preparing APRs, determining work priorities, drafting reports, or supervising Telecommunications Systems Control Technicians (AFSC 30770). This trend of supervisory and administrative tasks is also reflected in Table 15, with these incumbents spending 88 percent of their job time on supervisory or administrative duties. These respondents are the senior level managers of the career ladder, and fall into supervisory type jobs (see Table 16).

A comparison of the duties and tasks performed by 30770 and 30790/00 personnel reveals that 9-skill level or CEM Code 30700 personnel spend substantially more job time (88 percent) performing supervisory or administrative duties. Table 21 lists the tasks which best differentiate these two groups, and supervisory tasks, such as developing working agreements with host bases, serving on selection boards, or establishing office instructions (OIs) are performed by higher percentages of 30790/00 personnel. Technical tasks involving circuit monitoring or maintaining telecommunications services, such as making audio channel loop-backs, patching equipment, or making quality checks on standard test tone levels are more indicative of 30770 personnel. Overall, 30790/00 personnel seem to perform a higher level supervisory role than 30770 personnel.

Summary

An examination of the duties and tasks performed by various 307X0 skill level groups reveals some interesting trends. Three- and 5-skill level personnel were found to be performing the same type of job. This job is essentially technical in nature, and 30730/50 personnel primarily perform tasks involving circuit monitoring and analysis or maintaining telecommunications services. DAFSC 30770 personnel seem to be the first-line supervisors of the career ladder. Seven-skill level personnel perform many of the same technical tasks as 30730/50 personnel, but spend substantially more job time performing supervisory related tasks (48 percent). Nine-skill level and CEM Code 30700 personnel seem to be the middle or senior level supervisors of the career ladder. These incumbents spend 88 percent of their job time on supervisory or administrative duties, and spend very little time performing technical tasks.

TABLE 15

RELATIVE PERCENT TIME SPENT ON DUTIES BY DAFSC GROUPS

DUTIES	DAFSCs 30730 AND 30750 (N=866)	DAFSC 30770 (N=378)	DAFSC AND 30790 CEM CODE 30700 (N=41)
ORGANIZING AND PLANNING	3	11	20
DIRECTING AND IMPLEMENTING	8	20	31
INSPECTING AND EVALUATING	2	8	17
TRAINING	4	9	6
PERFORMING ADMINISTRATIVE FUNCTIONS	13	15	14
PERFORMING CIRCUIT MONITORING AND ANALYSIS	27	12	2
PERFORMING WIDEBAND SYSTEMS PERFORMANCE MONITORING AND ANALYSIS	7	3	2
MAINTAINING TELECOMMUNICATIONS SERVICE	23	11	2
ERECTING AND MAINTAINING TACTICAL AND COMBAT COMMUNICATIONS EQUIPMENT AND FACILITIES	5	3	*
PERFORMING GENERAL TELECOMMUNICATIONS FUNCTIONS	7	7	5

* DENOTES LESS THAN ONE PERCENT

TABLE 16

DISTRIBUTION BY JOB GROUPS FOR EACH DAFSC GROUP

JOB GROUPS	DAFSC				CEM CODE
	30730 (N=128)	30750 (N=738)	30770 (N=378)	30790 (N=38)	30700 (N=3)
DCS TECHNICAL CONTROL FACILITY PERSONNEL	(38)	(189)	28	-	-
SENIOR WIDEBAND AND AUTOVON SWITCHING PERSONNEL	21	106	23	-	-
WIDEBAND AND AUTOVON SWITCHING PERSONNEL	12	41	2	-	-
CIRCUIT QUALITY CONTROL PERSONNEL	-	5	1	-	-
NCOICs, QUALITY CONTROL	-	5	1	-	-
MICROWAVE AND INDEPENDENT SIDEBAND PERSONNEL	4	1	1	-	-
SHIFT SUPERVISORS	-	9	14	-	-
INSTRUCTORS	-	14	9	1	-
CIRCUIT ACTIONS NCOs	1	41	54	2	-
TACTICAL UNIT PERSONNEL	9	52	17	-	-
SATELLITE TCF PERSONNEL	2	8	1	-	-
AUTODIN SWITCHING CENTER PERSONNEL	10	46	8	-	-
AUTOMATIC SECURE VOICE NETWORK PERSONNEL	5	8	-	-	-
COMPUTER/MODEM CIRCUIT ANALYSIS PERSONNEL	7	30	6	-	-
NETWORK CONTROLLERS	-	4	1	-	-
AFGWC PATCH AND TEST PERSONNEL	1	4	-	-	-
SATELLITE NETWORK CONTROLLERS	-	8	-	-	-
TELECOMMUNICATIONS SUPERVISORS	-	8	(87)	(23)	3
FIRST LINE SUPERVISORS	-	6	6	-	-
CIRCUIT ACTIONS MANAGERS	-	7	12	1	-
STAFF ADMINISTRATIVE PERSONNEL	-	-	9	4	-
STAFF QUALITY CONTROL PERSONNEL	-	1	9	2	-
QUALITY CONTROL NCOs	1	9	3	-	-
PMP MANAGERS	-	4	3	-	-
TRAINING NCOs	-	8	5	-	-
RESIDENT COURSE INSTRUCTORS	-	8	-	-	-
CIRCUIT ANALYSIS NCOs	-	4	1	-	-
NCMO PERSONNEL	5	32	8	-	-
OTHER	12	80	50	2	-
TOTAL	128	738	378	38	3

TABLE 17

REPRESENTATIVE TASKS PERFORMED BY DAFSC 30730 AND 30750 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=866)
CLEAN WORK AREAS	79
PATCH EQUIPMENT, LINES, OR CHANNELS	73
PERFORM IDLE CHANNEL NOISE TESTS	73
COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	72
MAKE AUDIO CHANNEL LOOP-BACKS	69
MAKE QUALITY CHECKS ON STANDARD TEST TONE LEVELS	66
MAKE DIGITAL CIRCUIT LOOP-BACKS	64
MAKE EQUIPMENT LOOP-BACKS	64
PERFORM IMPULSE NOISE TESTS	62
ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	61
MAKE IN-SERVICE OR OUT-OF-SERVICE QUALITY CHECKS ON COMPOSITE SIGNAL TRANSMISSION LEVELS	61
PERFORM AMPLITUDE VS FREQUENCY TESTS (FREQUENCY RESPONSE TESTS)	61
PERFORM PHASE JITTER TESTS	61
PERFORM ENVELOPE DELAY DISTORTION TESTS	59
PERFORM MAXIMUM CHANGE IN AUDIO FREQUENCY TESTS	59
ANALYZE CAUSES OF DIGITAL CIRCUIT FAILURES	58
PERFORM FAULT ISOLATION ON ANALOG CIRCUITS	58
MAKE ON-CALL PATCHES	57
PERFORM MAXIMUM NET LOSS VARIATION TESTS	56
DIRECT ALTERNATE ROUTING OF CIRCUITS	56
PERFORM HARMONIC DISTORTION TESTS	54
PERFORM FAULT ISOLATION ON CIRCUITS USING BLACK DIGITAL PATCH BAYS	51
MAKE IN-SERVICE OR OUT-OF-SERVICE QUALITY CHECKS ON DIRECT CURRENT (DC) CIRCUITS	49
COORDINATE CIRCUIT RELEASES WITH SUBSCRIBERS	49
SERVE AS SPONSER FOR NEWLY ASSIGNED PERSONNEL	47

TABLE 18

REPRESENTATIVE TASKS PERFORMED BY DAFSC 30770 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=378)
PREPARE APRs	56
SERVE AS SPONSOR FOR NEWLY ASSIGNED PERSONNEL	56
PARTICIPATE IN ALERTS OR RECALLS	55
INDOCTRINATE NEWLY ASSIGNED PERSONNEL	55
DETERMINE WORK PRIORITIES	55
TYPE FORMS, REPORTS, OR CORRESPONDENCE	54
COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	53
WRITE CORRESPONDENCE	53
SUPERVISE TELECOMMUNICATIONS SYSTEMS CONTROL SPECIALISTS (AFSC 30750)	52
CLEAN WORK AREAS	51
COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	50
INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	48
DIRECT CIRCUIT OR SYSTEM CHECKS	48
CONDUCT OJT	47
ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	47
DEVELOP WORK METHODS OR PROCEDURES	46
DIRECT FAULT ISOLATION OR CORRECTION OF CIRCUIT OR SYSTEM MALFUNCTIONS	45
DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	45
PERFORM IDLE CHANNEL NOISE TESTS	44
ASSIGN PERSONNEL TO DUTY POSITIONS	44
PATCH EQUIPMENT, LINES, OR CHANNELS	43
MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	43
SCHEDULE LEAVES OR PASSES	42
EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	42
COUNSEL TRAINEES ON TRAINING PROGRESS	42

TABLE 19

TASKS BEST DISTINGUISHING DAFSC 30730 OR 30750 AND 30770 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 30730 AND 30750 (N=866)	DAFSC 30770 (N=378)	DIFFERENCE
MAKE AUDIO CHANNEL LOOP-BACKS	69	38	+31
MAKE DIGITAL CIRCUIT LOOP-BACKS	64	33	+31
PATCH EQUIPMENT, LINES, OR CHANNELS	73	43	+30
PERFORM IDLE CHANNEL NOISE TESTS	73	44	+29
MAKE ON-CALL PATCHES	57	28	+29
PERFORM PHASE JITTER TESTS	62	34	+28
CLEAN WORK AREAS	79	51	+28
MAKE IN-SERVICE OR OUT-OF-SERVICE QUALITY CHECKS ON COMPOSITE SIGNAL TRANSMISSION LEVELS	62	34	+28
MAKE QUALITY CHECKS ON STANDARD TEST TONE LEVELS	66	39	+27
PERFORM AMPLITUDE VS FREQUENCY TESTS (FREQUENCY RESPONSE TESTS)	61	34	+27
MAKE EQUIPMENT LOOP-BACKS	64	37	+27
PERFORM ENVELOPE DELAY DISTORTION TESTS	59	33	+26
WRITE CORRESPONDENCE	12	53	-41
PREPARE APRs	20	56	-36
SCHEDULE LEAVES OR PASSES	7	40	-33
COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	20	53	-33
PARTICIPATE IN STAFF MEETINGS	7	40	-33
DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES	7	39	-32
INDOCTRINATE NEWLY ASSIGNED PERSONNEL	23	55	-32
INDORSE AIRMEN PERFORMANCE REPORTS (APRs)	5	36	-31
INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	18	48	-30
SUPERVISE TELECOMMUNICATIONS SYSTEMS CONTROL TECHNICANS (AFSC 30770)	3	33	-30
ASSIGN PERSONNEL TO DUTY POSITIONS	14	44	-30
ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	9	38	-29

TABLE 20

REPRESENTATIVE TASKS PERFORMED BY DAFSC 30790 AND CEM CODE 30700 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=41)
WRITE CORRESPONDENCE	80
DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT OR SUPPLIES	71
WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS	68
PLAN BRIEFINGS	68
PARTICIPATE IN STAFF MEETINGS	68
ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS (OI), OR STANDARD OPERATING PROCEDURES (SOP)	66
PREPARE APRs	66
INDOCTRINATE NEWLY ASSIGNED PERSONNEL	66
DETERMINE WORK PRIORITIES	66
COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	63
DRAFT RECOMMENDATIONS FOR SYSTEM IMPROVEMENTS	61
CONDUCT BRIEFINGS OTHER THAN NAVIGATIONAL AIDS COMMUNICATION MANAGEMENT OFFICE (NCMO) BRIEFINGS	61
DIRECT MAINTENANCE OF ADMINISTRATIVE FILES	61
INTERPRET POLICES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	59
DRAFT REPORTS	59
RECEIVE OR DISTRIBUTE MESSAGES	59
SUPERVISE TELECOMMUNICATIONS SYSTEMS CONTROL TECHNICANS (AFSC 30770)	59
INDORSE AIRMEN PERFORMANCE REPORTS (APRs)	56
PREPARE RECOMMENDATIONS FOR AWARDS OR DECORATIONS	56
SCHEDULE LEAVES OR PASSES	56
ASSIGN PERSONNEL TO DUTY POSITIONS	56
COORDINATE SPECIAL COMMUNICATIONS REQUIREMENTS WITH USERS OR DCA	54
TYPE FORMS, REPORTS, OR CORRESPONDENCE	54
PREPARE OPERATIONAL MESSAGES	51
PREPARE UNIT EMERGENCY OR CONTINGENCY PLANS	51

TABLE 21

TASKS BEST DISTINGUISHING DAFSC 30770 AND 30790 OR CEM CODE 30700 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 30790 OR 30700 (N=41)	DAFSC 30770 (N=378)	DIFFERENCE
WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS	68	20	+48
PLAN BRIEFINGS	68	31	+37
CONDUCT BRIEFINGS OTHER THAN NAVIGATIONAL AIDS			
COMMUNICATION MANAGEMENT OFFICE (NMO) BRIEFINGS	61	24	+37
PREPARE UNIT EMERGENCY OR CONTINGENCY PLANS	51	17	+34
DRAFT RECOMMENDATIONS FOR SYSTEM IMPROVEMENTS	61	28	+33
DEVELOP WORKING AGREEMENTS WITH USING AGENCIES OR HOST BASES	51	19	+32
DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT OR SUPPLIES	71	39	+32
DIRECT MAINTENANCE OF ADMINISTRATIVE FILES	61	29	+32
SERVE ON SELECTION BOARDS, SUCH AS AIRMAN OF THE MONTH OR PROMOTION BOARDS	46	16	+30
ESTABLISH ORGANIZATIONAL POLICES, OFFICE INSTRUCTIONS (OIs), OR STANDARD OPERATING PROCEDURES (SOPs)	66	36	+30
PARTICIPATE IN STAFF MEETINGS	68	40	+28
WRITE CORRESPONDENCE	80	53	+27
MAKE QUALITY CHECKS ON STANDARD TEST TONE LEVELS	2	39	-37
CLEAN WORK AREAS	15	52	-37
PERFORM IDLE CHANNEL NOISE TESTS	7	44	-37
COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	15	51	-36
PATCH EQUIPMENT, LINES, OR CHANNELS	7	43	-36
MAKE AUDIO CHANNEL LOOP-BACKS	5	38	-33
MAKE EQUIPMENT LOOP-BACKS	5	38	-33
CONDUCT OJT	15	47	-32
PERFORM IMPULSE NOISE TESTS	7	38	-31
DIRECT ALTERNATE ROUTING OF CIRCUITS	8	38	-30
MAKE IN-SERVICE OR OUT-OF-SERVICE QUALITY CHECKS ON COMPOSITE SIGNAL TRANSMISSION LEVELS	5	34	-29
PERFORM FAULT ISOLATION ON ANALOG CIRCUITS	5	34	-29

COMPARISON OF SURVEY DATA TO AFR 39-1 SPECIALTY DESCRIPTIONS

Survey data for the 307X0 career ladder were compared to AFR 39-1 Specialty Descriptions, dated 1 June 1977 (for DAFSCs 30710, 30730, 30750, and 30770) and 31 October 1979 (for DAFSCs 30790 and CEM Code 30700). These descriptions are intended to give a broad overview of the duties and tasks required to be performed by the various skill level personnel. Overall, the 3-, 5-, 7-, and 9-skill level descriptions were found to provide a clear, concise overview of the major duties and tasks performed by 307X0 incumbents.

ANALYSIS OF EXPERIENCE (TAFMS) GROUPS

In addition to the skill level analysis, survey respondents were also examined on the basis of months of Total Active Federal Military Service (TAFMS). This analysis helps to determine how jobs and job perceptions change over time, and can help describe the types of jobs more junior 307X0 personnel can look forward to performing in the future.

As expected, no major deviations from the usual pattern of increasing time spent on supervisory duties with increasing months TAFMS were noted (see Table 22). Generally, more junior airmen spend more time performing technical communications functions, such as performing circuit monitoring or maintaining telecommunications service, while senior incumbents spend more time on directing and implementing, organizing and planning, and inspecting and evaluating duties.

Table 23 reveals the distribution of TAFMS groups across the major job groups identified in the CAREER LADDER STRUCTURE section. As expected, junior incumbents are found primarily in the major job groups identified in the Circuit Monitoring and Analysis functional area. More senior incumbents, especially those with more than 193 months TAFMS, are found primarily in the Supervision, Training, and Administration functional area. However, it is interesting to note that a substantial percentage of those 307X0 personnel with more than 193 months TAFMS can also be found in jobs in the Circuit Monitoring and Analysis functional area.

Job Satisfaction Analysis

Job satisfaction indices for personnel in the first enlistment (1-48 months TAFMS), second enlistment (49-96 months TAFMS), and career (97+ months TAFMS) were also examined. Job interest, perceived utilization of talents and training, and reenlistment intentions are presented in Table 24, along with the comparative sample for similar personnel from all related career fields analyzed in 1979. (These sample career ladders included ones in the 304XX, 306XX, 316XX, 321XX, 328XX, 423XX, 427XX, and 461XX career fields.) When compared to other career fields sampled, 307X0 first enlistment personnel have somewhat higher job satisfaction indicators, with approximately 15 percent more finding their job interesting and about 10 percent more finding

their job utilizes their talents or training at least fairly well. Reenlistment intentions for 307X0 first enlistment and comparative sample personnel appear to be about the same. DAFSC 307X0 second enlistment personnel show the same job interest, talents, and training trends as 307X0 first enlistment personnel when compared to the second enlistment comparative sample. However, reenlistment intentions for 307X0 second enlistment personnel are somewhat lower when compared to the comparative sample. Finally, a slightly lower percentage of 307X0 career personnel find their job interesting, perceive their job utilizes their talents or training, or plan to reenlist than career comparative sample personnel.

First Enlistment Personnel

First enlistment personnel were also examined on the basis of both common tasks performed and various background information. Table 25 lists those tasks performed by the greatest percentages of 307X0 first enlistment (1-48 months TAFMS) incumbents. Generally, these most common tasks involve some aspect of circuit monitoring and analysis or maintaining telecommunications service, such as making audio channel loop-backs, making on-call patches, performing idle channel noise tests, and coordinating circuit or equipment problems with other technical control or communications facilities.

Although the tasks listed in Table 25 are characteristic of most first enlistment personnel, other functions performed by these incumbents vary widely depending on the job they perform. Figure 2 presents the distribution of first enlistment 307X0 airmen across job groups identified in the CAREER LADDER STRUCTURE section. As expected, most first enlistment personnel can be identified in job groups found in the Circuit Monitoring and Analysis functional area, such as DCS Technical Control Facility Personnel or Wideband and Autovon Switching Personnel. Tasks which are typically performed by first enlistment personnel in the major job groups on Figure 2 include:

DCS Technical Control Facility Personnel

- analyze causes of digital circuit failures
- perform fault isolation on circuits using black digital patch bays
- make quality checks on standard test tone levels

Senior Wideband and AUTOVON Switching Personnel

- perform phase jitter tests
- measure pilots at baseband level
- perform quality assurance test of automatic voice network (AUTOVON) circuits

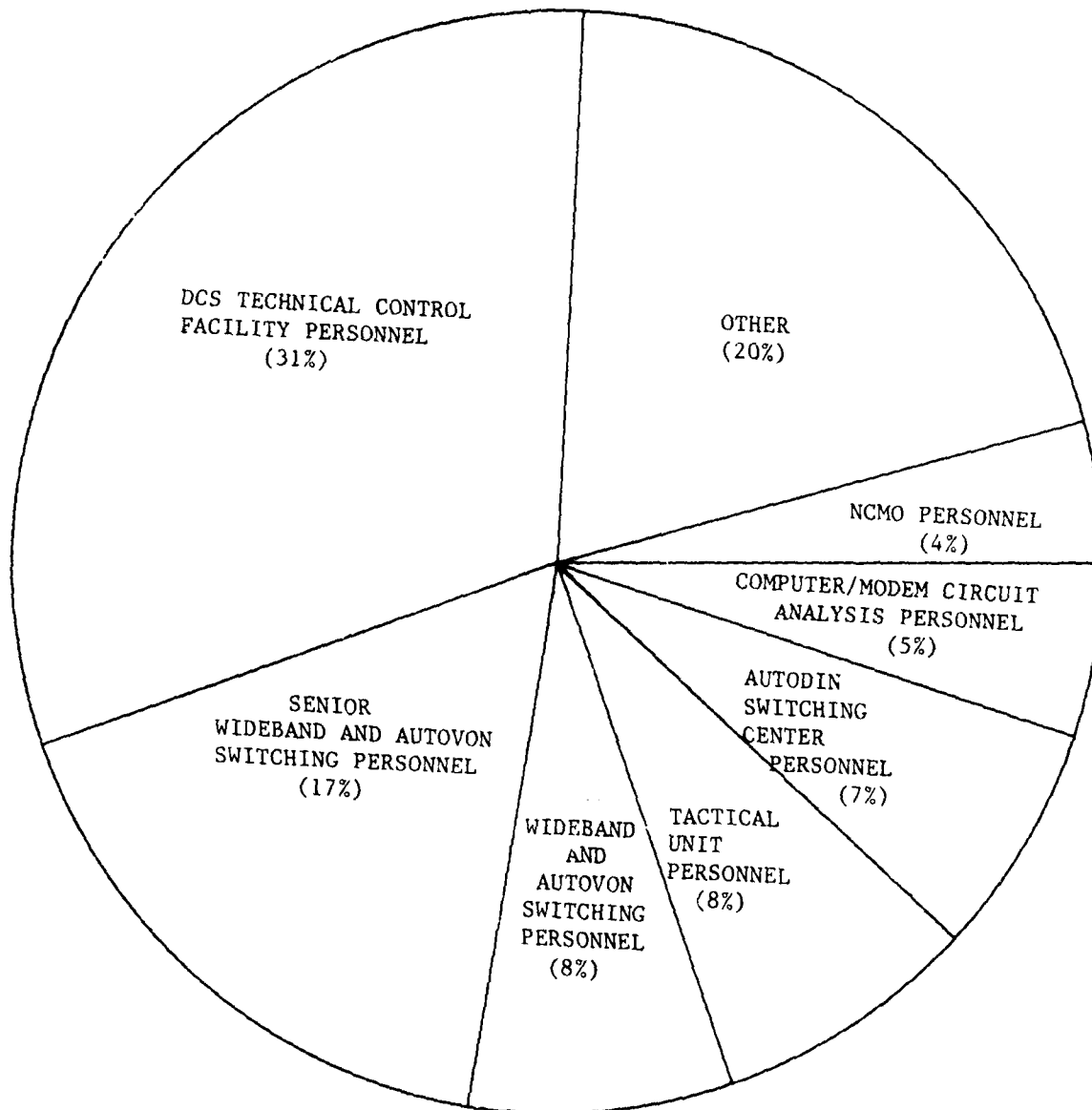
Wideband and AUTOVON Switching Personnel

- perform idle channel noise tests
- perform baseband sweeps
- perform impulse noise tests

Tactical Unit Personnel

- check continuity between local and distant controls
- pack or unpack equipment
- operate AN/TSC 60 van remote heads

FIGURE 2
JOB GROUP DISTRIBUTION FOR FIRST ENLISTMENT 307X0 AIRMEN
(N=414)



AUTODIN Switching Center Personnel

- make equipment loop-backs
- analyze causes of digital circuit failures
- perform fault isolation on circuits using red digital patch bays

Computer/Modem Monitoring Personnel

- make audio channel loop-backs
- perform bit error rate tests on digital circuits
- patch equipment, lines, or channels

NCMO Personnel

- prepare NCMO briefings
- maintain mission impairment reports
- store classified information or materials

In addition to an analysis of tasks the various pieces of equipment and test equipment used or operated by first enlistment personnel were examined. Table 26 reveals that teletypewriter equipment, circuit patch bays, distribution frames and black digital patch bays are among the most common types of equipment used or operated by first enlistment personnel. Table 27 reveals that teletypewriters, decibel (db) meters, speakers, and oscilloscopes are among the most common types of test equipment utilized by first enlistment personnel.

TABLE 22

PERCENTAGE OF TIME SPENT ON DUTIES BY 307X0 TAFMS GROUPS

DUTIES	MONTHS IN SERVICE					
	1-48 (N=414)	49-96 (N=369)	97-144 (N=203)	145-192 (N=127)	193-240 (N=108)	241+ (N=65)
ORGANIZING AND PLANNING	2	4	7	9	14	18
DIRECTING AND IMPLEMENTING	5	11	15	20	24	28
INSPECTING AND EVALUATING	3	3	4	8	9	16
TRAINING	1	6	9	8	9	7
PERFORMING ADMINISTRATIVE FUNCTIONS	12	15	13	15	16	15
PERFORMING CIRCUIT MONITORING AND ANALYSIS	31	23	19	13	9	4
PERFORMING WIDEBAND SYSTEMS PERFORMANCE MONITORING AND ANALYSIS	8	6	4	5	3	1
MAINTAINING TELECOMMUNICATIONS SERVICE	27	20	17	11	7	3
ERECTING AND MAINTAINING TACTICAL AND COMBAT COMMUNICATIONS EQUIPMENT AND FACILITIES	5	5	4	2	3	2
PERFORMING GENERAL TELECOMMUNICATIONS FUNCTIONS	8	7	8	6	7	5

*DENOTES LESS THAN ONE PERCENT

TABLE 23

DISTRIBUTION BY JOB GROUPS FOR EACH ENLISTMENT GROUP

JOB GROUPS	MONTHS TAFMS					
	1-48 (N=414)	49-96 (N=369)	97-144 (N=203)	145-192 (N=127)	193-240 (N=108)	241+ (N=65)
DCS TECHNICAL CONTROL FACILITY PERSONNEL	127	81	31	7	6	3
SENIOR WIDEBAND AND AUTOVON SWITCHING PERSONNEL	70	46	18	14	2	-
WIDEBAND AND AUTOVON SWITCHING PERSONNEL	35	15	3	1	1	-
CIRCUIT QUALITY CONTROL PERSONNEL	1	3	2	-	-	-
NCQICs, QUALITY CONTROL	1	3	2	-	-	-
MICROWAVE AND INDEPENDENT SIDEBAND PERSONNEL	4	1	-	-	1	-
SHIFT SUPERVISORS	-	10	6	5	1	1
INSTRUCTORS	3	10	3	6	2	-
CIRCUIT ACTIONS NCOS	10	29	29	13	14	3
TACTICAL UNIT PERSONNEL	35	40	17	4	6	3
SATELLITE TCF PERSONNEL	7	2	-	1	1	-
AUTODIN SWITCHING CENTER PERSONNEL	28	19	13	3	1	-
AUTOMATIC SECURE VOICE NETWORK PERSONNEL	11	2	-	-	-	-
COMPUTER/MODEM CIRCUIT ANALYSIS PERSONNEL	20	14	6	2	1	-
NETWORK CONTROLLERS	-	6	-	-	-	-
AFGWC PATCH AND TEST PERSONNEL	3	2	-	-	-	-
SATELLITE NETWORK CONTROLLERS	-	-	4	3	1	-
TELECOMMUNICATIONS SUPERVISORS	1	6	16	22	38	38
FIRST LINE SUPERVISORS	-	5	3	3	1	-
CIRCUIT ACTIONS MANAGERS	-	10	4	3	3	-
STAFF ADMINISTRATIVE PERSONNEL	-	-	2	3	6	2
STAFF QUALITY CONTROL PERSONNEL	1	-	1	2	2	6
QUALITY CONTROL NCOS	7	3	-	2	1	-
PMP MANAGERS	1	3	-	3	-	-
TRAINING NCQICs	5	4	1	3	-	-
RESIDENT COURSE INSTRUCTORS	1	3	4	-	-	-
CIRCUIT ANALYSIS NCOS	1	1	2	1	-	-
NCMO PERSONNEL	17	14	7	5	2	-
NOT GROUPED	25	27	29	21	19	5
TOTAL	414	369	203	127	108	65

TABLE 24

JOB SATISFACTION AND RELATED DATA FOR FIRST ENLISTMENT (1-48 MONTHS TAFMS),
SECOND ENLISTMENT (49-96 MONTHS TAFMS), CAREER (97+ MONTHS TAFMS),
AND COMPARATIVE SAMPLE PERSONNEL

(PERCENT MEMBERS RESPONDING)

	MONTHS TAFMS					
	1-48		49-96		97+	
	1979		1979		1979	
	307X0 (N=414)	COMP* SAMPLE (N=6,124)	307X0 (N=369)	COMP* SAMPLE (N=2,787)	307X0 (N=503)	COMP* SAMPLE (N=4,643)
I FIND MY JOB:						
NO RESPONSE	1	2	-	2	1	2
DULL	13	19	13	19	19	11
SO-SO	15	23	17	22	14	13
INTERESTING	71	56	70	57	66	74
MY JOB UTILIZES MY TALENTS:						
NO RESPONSE	1	1	-	1	1	1
NOT AT ALL TO VERY LITTLE	25	34	26	31	25	19
FAIRLY WELL OR BETTER	74	65	74	68	74	80
MY JOB UTILIZES MY TRAINING:						
NO RESPONSE	-	1	1	1	1	1
NOT AT ALL TO VERY LITTLE	29	40	25	33	30	23
FAIRLY WELL OR BETTER	71	59	74	66	69	76
I PLAN TO REENLIST:						
NO RESPONSE	1	2	1	2	2	2
NO OR PROBABLY NO	67	64	57	47	33	29
YES OR PROBABLY YES	32	34	42	51	65	69

*(INCLUDES PERSONNEL IN AFSCs 304XX, 306XX, 316XX, 321XX, 328XX, 423XX, 427XX, 461XX.)

TABLE 25

COMMON TASKS PERFORMED BY PERSONNEL WITH LESS THAN 48 MONTHS TAFMS

TASKS	PERCENT MEMBERS PERFORMING (N=414)
CLEAN WORK AREAS	84
PATCH EQUIPMENT, LINES, OR CHANNELS	79
PERFORM IDLE CHANNEL NOISE TESTS	79
COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	78
MAKE AUDIO CHANNEL LOOP-BACKS	75
MAKE QUALITY CHECKS ON STANDARD TEST TONE LEVELS	72
MAKE DIGITAL CIRCUIT LOOP-BACKS	70
PERFORM IMPULSE NOISE TESTS	70
MAKE EQUIPMENT LOOP-BACKS	69
PERFORM PHASE JITTER TESTS	67
ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	66
MAKE IN-SERVICE OR OUT-OF-SERVICE QUALITY CHECKS ON COMPOSITE SIGNAL TRANSMISSION LEVELS	66
PERFORM ENVELOPE DELAY DISTORTION TESTS	66
ANALYZE CAUSES OF DIGITAL CIRCUIT FAILURES	64
PERFORM AMPLITUDE VERSUS FREQUENCY TESTS (FREQUENCY RESPONSE TESTS)	64
PERFORM MAXIMUM CHANGE IN AUDIO FREQUENCY TESTS	64
PERFORM FAULT ISOLATION ON ANALOG CIRCUITS	64
PERFORM MAXIMUM NET LOSS VARIATION TESTS	62
MAKE ON-CALL PATCHES	60
PERFORM HARMONIC DISTORTION TESTS	60
DIRECT ALTERNATE ROUTING OF CIRCUITS	58
PERFORM FAULT ISOLATION ON CIRCUITS USING BLACK DIGITAL PATCH BAYS	54
PERFORM OPERATOR MAINTENANCE ON TELETYPEWRITERS, SUCH AS CHANGING RIBBONS OR REPLACING PAPER	54
COORDINATE CIRCUIT RELEASES WITH SUBSCRIBERS	53
MAKE IN-SERVICE OR OUT-OF-SERVICE QUALITY CHECKS ON DIRECT CURRENT (DC) CIRCUITS	52

TABLE 26

TYPICAL TYPES OF EQUIPMENT USED BY 307X0
FIRST ENLISTMENT PERSONNEL

EQUIPMENT	PERCENT MEMBERS UTILIZING (N=414)
TELETYPEWRITER EQUIPMENT	79
CIRCUIT PATCH BAYS	78
VOICE FREQUENCY PATCH BAYS	75
DISTRIBUTION FRAMES	68
CIRCUIT CONDITIONING EQUIPMENT	67
BLACK DIGITAL PATCH BAYS	60
VOICE FREQUENCY CARRIER TELEGRAPHS (VFCT)	56
VOICE FREQUENCY SIGNALING UNITS	54
ALARM SYSTEMS	51
FREQUENCY DIVISION MULTIPLEXING EQUIPMENT	49
CABLE PATCH BAYS	48
GROUP OR SUPERCROUP (WIDEBAND) PATCH BAYS	42
MICROWAVE LINK TERMINALS	42
RED DIGITAL PATCH BAYS	40
DIGITAL DATA MODEMS	39
COMMUNICATIONS PERFORMANCE MONITORS	33
HYBRID EQUIPMENT	34
CRYPTOGRAPHIC EQUIPMENT (NOT BULK)	32
CODEX CHANNEL PACKING EQUIPMENT	28
SECONDARY TEST BOARDS	23
TELEPHONE SWITCHBOARDS	22
COOKE DIGITAL PATCH PANELS	21
TIME DIVISION MULTIPLEXING EQUIPMENT	20

TABLE 27

TYPICAL TYPES OF TEST EQUIPMENT USED BY 307X0
FIRST ENLISTMENT PERSONNEL

EQUIPMENT	PERCENT MEMBERS UTILIZING (N=414)
TELETYPEWRITERS	88
DECIBEL (db) METERS	85
OSCILLOSCOPES	85
SPEAKERS	83
NOISE LEVEL MEASURING SETS	81
FREQUENCY COUNTERS	81
AUDIO FREQUENCY SIGNAL GENERATORS	76
IMPULSE NOISE COUNTERS	75
TRANSMISSION MEASURING SETS	72
TEST PATTERN GENERATORS	72
FREQUENCY SELECTIVE VOLTMETERS	70
ENVELOPE DELAY MEASURING SETS	70
DIGITAL DISTORTION ANALYZERS	70
PHASE JITTER MEASURING SETS	69
BRIDGING TRANSFORMERS	66
PEN RECORDERS, SUCH AS STRIP CHART	58
VOICE FREQUENCY CARRIER TELEGRAPHS (VFCT)	56
MILLIAMMETERS	54
HALCYON TEST SYSTEMS	54
VOICE FREQUENCY SIGNALING UNITS	54
DECADE ATTENUATORS	53
MULTIMETERS	53
IMPEDENCE BRIDGES	53
VOLUME UNIT (VU) METERS	49
ELECTRONIC VOLTMETERS	49
BIT ERROR RATE TEST SETS	47
DIGITAL (SQUARE WAVE) SIGNAL GENERATORS	47

ANALYSIS OF MAJOR COMMAND DIFFERENCES

An analysis of the tasks and duties performed by MAJCOM groups can highlight important differences. In many specialties, the jobs performed by various groups of personnel differs little across MAJCOMs, however, this is not the case in the 307X0 specialty. The ten largest users of 307X0 personnel (USAFE, AFLC, AFSC, ATC, HQ USAF, MAC, TAC, SAC, AFCC, PACAF) were examined, and five MAJCOMs had personnel performing somewhat unique tasks. In other words, the jobs performed by 307X0 personnel assigned to AFSC, ATC, HQ USAF, TAC, and SAC are somewhat different from other MAJCOM personnel.

Given below are brief job descriptions concerning the five "unique" users of 307X0 personnel. In addition, four tables at the end of this section provide job and background information for each of the ten MAJCOM groups identified above. For an overall view of how the jobs vary among MAJCOM groups, Table 28 reveals the relative job time spent performing duties. For example, ATC personnel spend 34 percent of their job time performing training related tasks, while SAC personnel spend 29 percent of their job time performing administrative tasks. Table 29 lists representative tasks which best differentiate MAJCOM groups, and seem to reflect many of the job trends identified in Table 28. Table 29 reveals only five of the ten MAJCOM groups are performing fairly unique tasks. For example, mobile communications tasks, such as erecting or dismantling antennae or reconfiguring AN/TSC 62 vans, are performed by substantial percentages of TAC personnel, while no unique tasks were identified as being performed by USAFE personnel. Table 30 lists various types of background information for MAJCOM groups, and reveals that AFCC personnel perform an average of 68 tasks and 50 percent work a rotating shift, while PACAF personnel average 97 months TAFMS and 44 percent hold the 7-skill level. Finally, Table 31 reveals various job satisfaction and related data for each MAJCOM group. For example, 100 percent of HQ USAF personnel find their job interesting and 89 percent plan to reenlist.

AFSC

The 30 personnel who are assigned to this MAJCOM perform primarily a technical job, and spend 46 percent of their job time performing circuit monitoring and maintaining telecommunications service (Table 28). These incumbents are differentiated due to the nature of circuit monitoring and analysis type tasks they perform, such as making quality checks on circuit speech levels, making in-service or out-of-service quality checks on cryptographic equipment, or performing envelope delay distortion tests. These incumbents perform an average of 75 tasks and average 98 months TAFMS. Job satisfaction indicators for these respondents are about average, with 67 percent finding their job interesting, and 37 percent planning to reenlist.

ATC

ATC personnel are primarily working at Keesler AFB MS, and are responsible for conducting resident course classroom training. These 25 respondents spend 34 percent of their job time performing training tasks,

and Table 29 reveals typical tasks include conducting resident course classroom training, scoring tests, and counseling trainees on training progress. Most of these incumbents work a day shift (80 percent) and 96 percent hold either the 5- or 7-skill level. In addition, 92 percent are working at a resident technical school, and only four percent are in their first enlistment. These incumbents are fairly motivated, with 88 percent finding their job utilizes their training at least fairly well, and 52 percent planning to reenlist.

HQ USAF

HQ USAF personnel spend 43 percent of their job time performing supervisory tasks. However, an examination of the type of tasks performed which differentiate these nine incumbents reveals these tasks are primarily related to staff functions. In addition, only a small percentage report supervising anyone. Typical staff related tasks performed by these incumbents include planning layout of facilities, inspecting communications facilities, or drafting budget or financial requirements. These respondents are the most senior of all MAJCOM groups, having an average paygrade of E-6 and averaging 181 months TAFMS. In addition, these incumbents appear very satisfied with their job, with 100 percent finding their job interesting and 89 percent planning to reenlist.

TAC

A majority of the 44 personnel assigned to TAC are working at tactical mobile communications units. Compared to other MAJCOMs, these incumbents spend more job time (19 percent) erecting and maintaining tactical communications equipment and facilities. This same trend is reflected in the tasks which best differentiate TAC personnel, and include such tactical communications tasks as erecting or dismantling antennae, preparing mobile vans for transport or storage, or reconfiguring AN/TSC 62 vans. It is interesting to note that 30 percent of these incumbents work a variable shift, and only 11 percent plan to reenlist.

SAC

The nine personnel assigned to SAC spend 29 percent of their job time performing administrative tasks, and 56 percent report working at NCMO locations. NCMO type tasks are typically performed and best differentiate these incumbents, and include conducting NCMO briefings, coordinating requests for maintenance assistance, or maintaining mission impairment reports. A review of background information for SAC respondents reveals these incumbents perform the lowest average number of tasks (26) and averaged the lowest months TAFMS (47) of all MAJCOM groups. Somewhat expectedly, these incumbents also report the lowest job satisfaction indicators, with only 33 percent perceiving their job interesting, 11 percent planning to reenlist or perceiving their job utilizes their talents at least fairly well, and only 22 percent perceiving their training is utilized at least fairly well.

Summary

The jobs performed by 307X0 personnel vary considerably depending on the MAJCOM assigned. Five of the ten MAJCOMs in which 307X0 personnel are assigned were found to be performing somewhat differentiating tasks. AFSC personnel are more likely to perform certain types of circuit monitoring tasks. ATC personnel seem responsible for conducting 307X0 resident course classroom training. HQ USAF personnel seem to be performing a staff related job. TAC personnel are working at tactical communications units and are responsible for timely tactical communications. Finally, SAC personnel are performing a job very similar to NCMO Personnel identified in the CAREER LADDER STRUCTURE. Overall, HQ USAF personnel are the most satisfied, SAC personnel the least satisfied, and ATC, AFSC, and TAC personnel fall in between.

TABLE 28

PERCENTAGE OF TIME SPENT ON DUTIES BY MAJOR COMMAND GROUPS

DUTIES	USAF (N=62)	AFLC (N=4)	AFSC (N=30)	ATC (N=25)	HQ USAF (N=9)	MAC (N=5)	TAC (N=44)	SAC (N=9)	AFCC (N=1,031)	PACAF (N=9)
ORGANIZING AND PLANNING	8	1	4	7	8	6	5	5	6	8
DIRECTING AND IMPLEMENTING	18	13	13	8	23	17	11	10	12	12
INSPECTING AND EVALUATING	6	4	5	3	10	5	4	1	4	2
TRAINING	4	3	7	34	2	4	4	1	5	3
PERFORMING ADMINISTRATIVE FUNCTIONS	17	18	12	2	18	15	8	29	14	17
PERFORMING CIRCUIT MONITORING AND ANALYSIS	11	38	26	24	10	24	16	15	23	20
PERFORMING WIDEBAND SYSTEMS PERFORMANCE MONITORING AND ANALYSIS	3	3	4	12	1	1	1	*	6	1
MAINTAINING TELECOMMUNICATIONS SERVICE	14	16	20	5	16	20	21	22	20	13
ERECTING AND MAINTAINING TACTICAL AND COMBAT COMMUNICATIONS EQUIPMENT AND FACILITIES	11	*	4	*	2	4	19	1	3	12
PERFORMING GENERAL TELECOMMUNICATIONS FUNCTIONS	8	5	5	5	9	4	10	15	7	12

*DENOTES LESS THAN ONE PERCENT

TABLE 29

TASKS WHICH BEST DIFFERENTIATE MAJOR COMMAND GROUPS
(PERCENT MEMBERS PERFORMING)

TASKS	USAF	AFLC	AFSC	ATC	HQ USAF	MAC	TAC	SAC	AFCC	PACAF
SUPPORT DCA TEAMS DURING PERFORMANCE EVALUATIONS	6	-	33	-	11	-	-	-	19	11
MAKE IN-SERVICE OR OUT-OF-SERVICE QUALITY CHECKS ON CRYPTOGRAPHIC EQUIPMENT	11	25	40	-	22	20	14	-	22	22
MAKE QUALITY CHECKS OF CIRCUIT SPEECH LEVELS	32	25	50	24	11	20	30	11	37	22
PERFORM ENVELOPE DELAY DISTORTION TESTS	13	25	67	48	22	20	11	33	56	22
ADMINISTER TESTS	13	-	20	84	11	-	11	11	11	-
CONDUCT RESIDENT COURSE CLASSROOM TRAINING	5	-	7	88	22	-	5	-	2	-
COUNSEL TRAINEES ON TRAINING PROGRESS	24	25	27	64	11	20	23	-	27	22
DETERMINE RESIDENT COURSE TRAINING REQUIREMENTS	5	-	10	40	11	-	2	-	3	-
SCORE TESTS	11	-	17	92	11	20	11	-	10	-
WRITE TEST QUESTIONS	13	-	13	88	11	20	11	-	13	-
PLAN QUALITY ASSURANCE PROGRAMS	18	-	7	-	33	20	18	-	11	-
PLAN LAYOUT OF FACILITIES	21	-	7	-	44	20	16	-	9	-
DRAFT BUDGET OR FINANCIAL REQUIREMENTS	16	-	3	4	44	-	2	-	6	-
MAINTAIN TREND ANALYSIS FILES	15	-	13	-	44	-	2	-	13	11
INSPECT COMMUNICATIONS FACILITIES	19	-	7	4	44	-	16	-	9	11
MAKE IN-SERVICE OR OUT-OF-SERVICE QUALITY CHECKS ON HIGH FREQUENCY (HF) OR INDEPENDENT SIDEBAND (ISB) SYSTEMS	27	-	27	4	11	-	50	-	14	22
ADJUST SIGNALING UNITS	18	-	17	4	22	-	41	-	28	-
ERECT OR DISMANTLE ANTENNAE	13	-	3	-	11	-	34	-	2	11
RECONFIGURE AN/TSC 62 VANS	29	-	3	-	11	-	48	-	3	-
PREPARE MOBILE VANS FOR TRANSPORT OR STORAGE	35	-	7	-	11	-	61	-	3	22
CONDUCT NCHO BRIEFINGS	11	-	3	-	11	-	5	44	5	-
PREPARE NCHO BRIEFINGS	13	-	7	-	11	-	9	56	9	11
COORDINATE REQUESTS FOR MAINTENANCE ASSISTANCE	21	-	30	12	33	20	18	44	20	11
MAINTAIN MISSION IMPAIRMENT REPORTS	5	-	13	-	22	-	2	44	8	-
MAINTAIN JOB/STATUS DOCUMENT FORMS (AF FORM 264)	3	-	3	-	11	-	-	33	3	-

TABLE 30

BACKGROUND INFORMATION FOR MAJOR COMMAND GROUPS

	USAF	AFLC	AFSC	ATC	HQ USAF	MAC	TAC	SAC	AFCC	PACAF
AVERAGE NUMBER OF TASKS PERFORMED:	69	29	75	43	91	54	72	26	68	46
AVERAGE PAYGRADE:	E-5	E-4	E-5	E-5	E-6	E-5	E-4	E-4	E-5	E-5
AVERAGE MONTHS TAFMS:	110	53	98	113	(181)	104	87	47	95	97
PERCENT IN FIRST ENLISTMENT:	11%	(50%)	26%	4%	40%	25%	34%	40%	40%	33%
DAFSC:										
30730	-	-	10%	4%	-	20%	14%	22%	11%	-
30750	58%	75%	60%	64%	11%	40%	59%	78%	58%	56%
30770	40%	25%	30%	32%	67%	20%	27%	-	28%	44%
30790	2%	-	-	-	22%	20%	-	-	3%	-
CEM CODE 30700										

WORK SHIFT:

DAY SHIFT	50%	25%	43%	(80%)	67%	60%	55%	-	31%	44%
ROTATING SHIFTS	11%	50%	33%	-	33%	20%	5%	(18%)	50%	33%
VARIABLE DEPENDING ON WORKLOAD	18%	-	-	4%	-	-	(30%)	-	5%	11%

TYPE OF UNIT ASSIGNED:

AUTODIN SWITCHING CENTER	-	50%	3%	-	-	40%	-	-	7%	11%
DCS TECHNICAL CONTROL FACILITY	7%	-	33%	-	-	-	5%	11%	38%	33%
NCMO	8%	-	-	-	11%	-	-	(56%)	5%	11%
RESIDENT TECHNICAL SCHOOL	-	-	-	(92%)	-	-	-	-	-	-
TACTICAL UNITS	45%	-	-	-	-	-	(66%)	-	-	33%

TABLE 31

JOBS SATISFACTION DATA FOR MAJOR COMMAND GROUPS
(PERCENT MEMBERS RESPONDING)

	USAF	AFLC	AFSC	ATC	HQ USAF	MAC	TAC	SAC	AFCC	PACAF
<u>I FIND MY JOB:</u>										
NO RESPONSE	-	-	7	-	-	-	-	-	1	-
DULL	21	50	13	20	-	-	16	56	12	56
SO-SO	29	-	13	16	-	40	16	11	15	-
INTERESTING	50	50	67	64	100	60	68	(33)	72	44
<u>MY JOB UTILIZES MY TALENTS:</u>										
NO RESPONSE	-	-	3	-	-	-	-	-	-	-
NOT AT ALL TO VERY LITTLE	42	50	13	16	11	20	34	89	23	67
FAIRLY WELL OR BETTER	58	50	84	84	89	80	66	(11)	77	(33)
<u>MY JOB UTILIZES MY TRAINING:</u>										
NO RESPONSE	-	-	3	-	-	-	-	-	1	-
NOT AT ALL TO VERY LITTLE	50	75	23	12	22	40	50	78	25	56
FAIRLY WELL OR BETTER	50	(25)	74	88	78	60	50	(22)	74	44
<u>I PLAN TO REENLIST:</u>										
NO RESPONSE	-	-	-	-	-	-	-	11	1	-
NO OR PROBABLY NO	47	75	63	48	11	60	71	78	51	56
YES OR PROBABLY YES	53	(25)	37	52	89	40	(29)	(11)	48	44

ANALYSIS OF TELECOMMUNICATIONS FACILITIES GROUPS

In addition to examining the job structure of the Telecommunications Systems Control career ladder, the various jobs performed by personnel working at 18 different telecommunications facilities were also examined. These 18 telecommunications facilities include personnel working at AUTODIN Centers, AUTOVON Centers, Combat Communications Groups, Defense Communication Agency (DCA) facilities, DCS Patch and Test facilities, DCS Test Control facilities, AFMPC, NCMOs, non-DCS Technical Control facilities, Patch and Test facilities, Test and Evaluation Units, Resident Technical Schools, Satellite Technical Control Facilities, Tactical Units, Telecommunications Requirement Offices, Wideband and Autovon facilities, Wideband Technical Control Facilities, and "other" facilities. Generally, only the personnel working at seven of the 18 telecommunications facilities were identified as performing differentiating tasks, and these tasks seem related to either the type of equipment found at the facility or the mission performed at the facility.

The seven telecommunications facilities groups identified as performing unique tasks are AUTODIN Center personnel, AFMPC personnel, NCMO personnel, Resident Technical School personnel, Tactical Unit personnel, Telecommunications Requirements Office personnel, and Wideband Technical Control facility personnel. To help identify the factors which distinguish these personnel from the personnel working at other telecommunications facilities, four tables provide duty, background, and job satisfaction information for all telecommunications facilities groups. Also, an additional table provides task information for the seven groups identified as performing unique tasks. Tables 32 and 33 provide the relative percent time spent on duties by facility groups, and gives an overall view of what functions the 18 telecommunications facilities groups concentrate on. Table 34 lists the tasks which best differentiate the seven groups who are performing unique tasks. Table 35 and 36 provide various background and job satisfaction information for all facilities groups, and includes such information as the average number of tasks performed, DAFSC distribution, reenlistment intentions, and work shift distribution. Finally, a brief job description for the seven telecommunications facilities groups identified as performing unique tasks are provided below:

AUTODIN Center Personnel

The 76 incumbents working at this type of facility spend a majority of their job time performing AUTODIN circuit monitoring and maintaining AUTODIN telecommunications services. Differentiating tasks performed by AUTODIN Center personnel primarily involve various AUTODIN circuit monitoring and analysis tasks, such as making in-service or out-of-service quality checks on cryptographic equipment or data buffers and performing fault isolation on AUTODIN switching center equipment. Only 34 percent of these respondents are stationed overseas and 86 percent hold the 5- or 7-skill level.

AFMPC Personnel

These five incumbents perform primarily a technical job, spending 22 percent of their job time performing circuit monitoring and 24 percent of their time maintaining telecommunications services. These incumbents are responsible for insuring that communications between the AFMPC personnel computer and other base personnel computers are operational. The types of differentiating tasks performed by these incumbents are computer related, and include making in-service or out-of-service quality checks on data terminals or making in-service or out-of-service quality checks on digital data modems. A review of background and job satisfaction information for these respondents reveals all hold the 5- or 7-skill level, all find their job interesting, and only 20 percent plan to reenlist.

NCMO Personnel

NCMO personnel are differentiated due to the small amount of job time spent performing technical tasks and the rather large amount spent performing administrative tasks. This same trend is reflected in the differentiating tasks these incumbents perform, with administrative tasks, such as maintaining commanders' situation reports (SITREP) or maintaining mission impairment reports being performed by substantial percentages of NCMO personnel. These respondents perform a low average number of tasks (38) and have low job satisfaction indicators, with only 44 percent finding their job interesting and only 28 percent perceiving their training is utilized at least fairly well.

Resident Technical School Personnel

The 22 personnel working at the 307X0 technical school located at Keesler AFB MS are responsible for conducting various aspects of 307X0 resident course classroom training. These incumbents spend 37 percent of their job time performing training tasks, such as writing test questions, selecting individuals for specialized training, and developing resident course or career development course (CDC) curriculum materials. As expected, most of these incumbents are assigned to ATC, and 92 percent perceive their training is utilized at least fairly well.

Tactical Unit Personnel

Tactical Unit personnel perform primarily a technical job involving mobile communications. These 63 incumbents spend 20 percent of their job time erecting and maintaining tactical and combat communications equipment. Technical tactical communication tasks are performed by high percentages of these incumbents, and include preparing mobile vans for storage, camouflaging mobile sites, and erecting or dismantling tents. It is interesting to note that 57 percent of these incumbents are working overseas, and 95 percent hold the 5- or 7-skill level.

Telecommunications Requirements Office Personnel

The 16 persons working at Telecommunications Requirements Offices seem to perform more of a staff job than that of a supervisor, and only 19 percent of these incumbents report supervising anyone. Tasks which best differentiate these incumbents are also staff related, and include establishing charges in circuits or channels, developing working agreements with using agencies or host bases, or maintaining Defense Communication System (DCS) data bases. These incumbents are fairly senior (averaging 146 months TAFMS) and 69 percent hold the 7- or 9-skill level. In addition, these incumbents are fairly motivated, with 69 percent planning to reenlist and 88 percent finding their job interesting.

Wideband Technical Control Facility Personnel

The 36 incumbents working at this type of facility spend 12 percent of their job time performing wideband systems performance monitoring and analysis. These incumbents perform a job very similar to Wideband and AUTOVON Personnel, another telecommunications facilities group, in that both groups have high percentages of personnel who perform wideband tasks. However, slightly higher percentages of Wideband TCF personnel perform these differentiating wideband tasks, such as determining link status, calculating link idle channel noise (ICN) values, and performing baseband loading (BBL) measurements. Ninety-two percent of these personnel are located overseas, and 80 percent hold the 3- and 5-skill levels. These incumbents seem fairly motivated with their job, with 75 percent finding their job interesting and 50 percent planning to reenlist.

Summary

Overall, the jobs and tasks performed vary somewhat across different technical control facilities groups. In addition, job satisfaction indicators also vary greatly, with Combat Communications Group personnel, NCMO personnel, and Tactical Unit Personnel among the telecommunications facilities groups with the lowest perceived job satisfaction. Management should closely examine the types of jobs performed at these telecommunications facilities and try to find ways to improve their job perceptions.

TABLE 42

RELATIVE PERCENT TIME SPENT ON DUTIES BY TELECOMMUNICATIONS FACILITIES GROUPS

DUTIES	AUTODIN CENTER PERSONNEL (N=16)	AUTOVON CENTER PERSONNEL (N=47)	COMBAT COMMUNICATIONS GROUP PERSONNEL (N=57)	DCA PERSONNEL (N=24)	DCS PATCH AND TEST FACILITY PERSONNEL (N=27)	DCS TEST CONTROL FACILITY PERSONNEL (N=420)	AFMPC PERSONNEL (N=5)	NMO PERSONNEL (N=63)	NON-DCS CONTROL FACILITY PERSONNEL (N=54)
ORGANIZING AND PLANNING	4	4	5	8	6	4	2	7	4
DIRECTING AND IMPLEMENTING	12	9	9	31	15	11	12	16	11
INSPECTING AND EVALUATING	3	3	4	5	5	3	6	5	3
TRAINING	6	7	4	2	7	5	8	8	3
PERFORMING ADMINISTRATIVE FUNCTIONS	14	8	16	16	15	11	8	41	10
PERFORMING CIRCUIT MONITORING AND ANALYSIS	19	37	14	8	22	27	22	2	23
PERFORMING WIDE BAND SYSTEMS PERFORMANCE	8	8	1	3	4	7	4	*	1
MONITORING AND ANALYSIS	35	16	17	16	17	23	24	2	2
MAINTAINING TELECOMMUNICATIONS SERVICE	3	3	17	2	3	3	10	*	5
ERECTING AND MAINTAINING TACTICAL AND COMBAT									
COMMUNICATIONS EQUIPMENT AND FACILITIES	5	4	12	9	7	5	12	18	8
PERFORMING GENERAL TELECOMMUNICATIONS									
FUNCTIONS									

* DENOTES LESS THAN ONE PERCENT

TABLE 33

RELATIVE PERCENT TIME SPENT ON DUTIES BY TELECOMMUNICATIONS FACILITIES GROUPS (CONTINUED)

DUTIES	PATCH AND TEST EVALUATION UNIT FACILITY PERSONNEL (N=57)	RESIDENT TECHNICAL SCHOOL PERSONNEL (N=24)	SATELLITE TECHNICAL CONTROL FACILITY PERSONNEL (N=38)	TACTICAL UNIT PERSONNEL (N=63)	TELE- COMMUNICATIONS REQUIREMENTS OFFICE PERSONNEL (N=16)	WIDE- BAND TECHNICAL CONTROL FACILITY PERSONNEL (N=181)	WIDE- BAND TECHNICAL CONTROL FACILITY PERSONNEL (N=36)	"OTHER" PERSONNEL
ORGANIZING AND PLANNING	4	9	7	6	21	4	3	13
DIRECTING AND IMPLEMENTING	8	10	7	13	33	9	7	25
INSPECTING AND EVALUATING	3	5	3	6	5	3	2	12
TRAINING	5	5	37	4	2	5	4	6
PERFORMING ADMINISTRATIVE FUNCTIONS	16	10	3	10	26	9	11	20
PERFORMING CIRCUIT MONITORING AND ANALYSIS	21	28	23	13	1	33	27	4
PERFORMING WIDE- BAND SYSTEMS PERFORMANCE MONITORING AND ANALYSIS	2	4	13	1	2	12	12	1
MAINTAINING TELECOMMUNICATIONS SERVICE	31	8	5	17	2	18	23	6
ERECTING AND MAINTAINING TACTICAL AND COMBAT COMM- UNICATIONS EQUIPMENT AND FACILITIES	4	5	3	20	2	3	4	2
PERFORMING GENERAL TELECOMMUNICATIONS FUNCTIONS	7	15	5	10	7	5	6	10

FIGURES LESS THAN ONE PERCENT

TABLE 34

REPRESENTATIVE TASKS WHICH BEST DIFFERENTIATE TELECOMMUNICATIONS FACILITIES GROUPS
(PERCENT MEMBERS PERFORMING)

TASKS	AUTODIN CENTER PERSONNEL	AFMPC	NCHC PERSONNEL	RESIDENT TECHNICAL SCHOOL PERSONNEL	TACTICAL UNIT PERSONNEL	TELE COMMUNICATIONS REQUIREMENTS OFFICE	WIDEBAND TECHNICAL CONTROL FACILITY PERSONNEL
MAKE IN-SERVICE OR OUT-OF-SERVICE QUALITY CHECKS ON CRYPTOGRAPHIC EQUIPMENT	68	30	-	-	6	-	3
MAKE IN-SERVICE OR OUT-OF-SERVICE QUALITY CHECKS ON DATA BUFFERS	30	-	-	-	3	-	1
PERFORM FAULT ISOLATION ON AUTODIN SWITCHING CENTER EQUIPMENT	67	-	-	-	2	-	1
MAKE IN-SERVICE OR OUT-OF-SERVICE QUALITY CHECKS ON DATA TERMINALS	14	40	2	-	10	-	3
MAKE IN-SERVICE OR OUT-OF-SERVICE QUALITY CHECKS ON DIGITAL DATA MODEMS	39	60	-	-	8	-	9
PERFORM BIT ERROR RATE TESTS ON DIGITAL CIRCUITS	21	80	3	18	8	0	13
SUPERVISE PERSONNEL WITH AFSCs OTHER THAN AFSC 307X0	3	-	30	9	16	13	4
MAINTAIN COMMANDERS' SITUATION REPORTS (SITREP) OR SUMMARIES	3	-	37	-	2	-	2
MAINTAIN MISSION IMPAIRMENT REPORTS	4	-	63	-	2	-	3
WRITE TEST QUESTIONS	16	-	16	95	22	-	20
DEVELOP RESIDENT COURSE OR CAREER DEVELOPMENT COURSE (CDC)	4	-	-	32	5	-	2
CURRICULUM MATERIALS	5	-	5	91	6	-	3
CONDUCT RESIDENT COURSE CLASSROOM TRAINING	8	-	5	36	11	-	7
SELECT INDIVIDUALS FOR SPECIALIZED TRAINING	3	-	-	-	-	-	-
CONDUCT PERFORMANCE ASSESSMENT OF TACTICAL OR MOBILITY COMMUNICATIONS SYSTEMS	3	-	-	-	56	-	1
PREPARE MOBILE VANS FOR TRANSPORT OR STORAGE	3	-	7	-	70	-	1
ERECT OR DISMANTLE TENTS	3	-	2	-	54	-	2
CAMOUFLAGE MOBILE SITES	3	-	2	-	51	-	2
MAINTAIN DEFENSE COMMUNICATION SYSTEM (DCS) DATA BASES	9	-	3	-	5	50	4
MAINTAIN MODIFIED USE OF LEASED COMMUNICATION FACILITIES REPORTS (DECCO)	5	-	-	-	-	38	4
ESTABLISH CHANGES IN CIRCUITS OR CHANNELS	11	20	3	-	35	50	10
DEVELOP WORKING AGREEMENTS WITH USING AGENCIES OR HOST BASES	9	-	11	-	13	45	9
CALCULATE LINK BUDGET CHANNEL NOISE (ICN) VALUES	3	-	3	36	27	13	78
DETERMINE LINK STATUS	3	-	5	18	29	13	75
PERFORM BASEBAND LOADING (BBL) MEASUREMENTS	4	-	2	45	3	-	58

BACKGROUND INFORMATION AND JOB SATISFACTION DATA FOR TELECOMMUNICATIONS FACILITIES GROUPS

	AUTOBIO CENTER PERSONNEL		COMBAT COMMUNICATIONS GROUP PERSONNEL		DCA PERSONNEL		DCA PATCH AND TEST FACILITY PERSONNEL		DCA TEST AND TEST FACILITY PERSONNEL		AFMPC PERSONNEL		NMO PERSONNEL		NON-DCS CONTROL FACILITY PERSONNEL	
AVERAGE NUMBER OF TASKS PERFORMED:																
AVERAGE PAYGRADE:	48	71	62	48	75	79	45	48	56							
AVERAGE TAFMS:	E-4	E-4	E-5	E-4	E-5	E-4	E-5	E-5	E-5							
PERCENT LOCATED OVERSEAS:	84	78	99	114	114	84	99	109	99							
	34%	100%	18%	79%	70%	32%	-	44%	34%							
DAFSC:																
30730	11%	3%	9%	4%	4%	15%	-	9%	4%							
30750	64%	86%	59%	-	63%	61%	80%	59%	63%							
30770	22%	8%	32%	79%	33%	22%	20%	29%	33%							
30796	3%	3%	-	17%	-	2%	-	3%	-							
CEM CODE 30700	-	-	-	-	-	-	-	-	-							
JOB SATISFACTION DATA:																
PERCENT FINDING THEIR JOB INTERESTING	72%	73%	(49%)	66%	63%	80%	100%	(44%)	66%							
PERCENT PERCEIVING THEIR TALENTS ARE UTILIZED AT LEAST FAIRLY WELL	70%	68%	60%	83%	70%	87%	80%	(35%)	61%							
PERCENT PERCEIVING THEIR TRAINING IS UTILIZED AT LEAST FAIRLY WELL	67%	89%	47%	75%	67%	85%	60%	(28%)	49%							
PERCENT PLANNING TO REENLIST	(36%)	51%	(35%)	79%	44%	46%	(70%)	(48%)	54%							
WORK SHIFT:																
DAY SHIFT	29%	19%	63%	38%	44%	25%	80%	22%	26%							
SWING SHIFT	11%	-	-	-	4%	1%	-	5%	6%							
MID SHIFT	12%	-	-	-	-	2%	-	6%	7%							
12-HOUR DAY SHIFT	-	-	11%	-	-	2%	-	6%	0%							
12-HOUR NIGHT SHIFT	-	-	5%	-	-	-	-	3%	0%							
ROTATING SHIFTS	46%	76%	11%	50%	44%	63%	-	43%	35%							

TABLE 36

BACKGROUND INFORMATION AND JOB SATISFACTION DATA FOR TELECOMMUNICATIONS FACILITIES GROUPS (CONTINUED)

	PATCH AND TEST AND TEST EVALUATION FACILITY UNIT PERSONNEL		SATELLITE TECHNICAL CONTROL FACILITY UNIT PERSONNEL		TELE- COMMUNICATIONS OFFICE PERSONNEL		WIDE- BAND TECHNICAL CONTROL FACILITY PERSONNEL		"OTHER" PERSONNEL	
	50	42	44	45	79	32	83	84	42	
AVERAGE NUMBER OF TASKS PERFORMED:	E-4, E-5	E-5	E-5	E-4	E-5	E-4	E-4	E-4	E-6	
AVERAGE PAYGRADE:	85	149	112	82	102	146	81	68	169	
AVERAGE TAFTS:	53%	44%	-	42%	57%	63%	100%	92%	47%	
PERCENT LOCATED OVERSEAS:										
DAFSC:										
30730	9%	-	5%	5%	5%	-	13%	19%	2%	
30750	63%	33%	63%	68%	60%	31%	60%	61%	24%	
30770	26%	61%	32%	27%	35%	50%	24%	20%	58%	
30790	2%	6%	-	-	-	19%	3%	-	12%	
CEM CODE 30700	-	-	-	-	-	-	-	-	4%	
JOB SATISFACTION DATA:										
PERCENT FINDING THEIR JOB INTERESTING	68%	80%	68%	61%	49%	88%	80%	75%	63%	
PERCENT PERCEIVING THEIR TALENTS ARE UTILIZED AT LEAST FAIRLY WELL	67%	82%	86%	66%	49%	87%	82%	78%	72%	
PERCENT PERCEIVING THEIR TRAINING IS UTILIZED AT LEAST FAIRLY WELL	74%	72%	92%	62%	38%	75%	87%	78%	49%	
PERCENT PLANNING TO REENLIST	54%	62%	59%	37%	32%	69%	50%	50%	58%	
WORK SHIFT:										
DAY SHIFT	33%	83%	86%	40%	52%	88%	10%	22%	71%	
SWING SHIFT	6%	-	-	11%	-	-	-	-	1%	
MID SHIFT	4%	-	-	18%	-	-	-	-	-	
12-HOUR DAY SHIFT	2%	6%	-	-	3%	-	2%	3%	3%	
12-HOUR NIGHT SHIFT	2%	-	-	-	-	-	-	-	-	
ROTATING SHIFTS	40%	-	-	24%	5%	-	70%	58%	7%	

ANALYSIS OF CONUS VERSUS OVERSEAS GROUPS

A comparison was made between the tasks performed and the background data for the DAFSC 30750 personnel who were assigned within the CONUS versus those who were assigned to overseas locations. Overall, the jobs performed by the two groups are very similar with respect to the tasks performed and the time spent on those tasks. However, the job of the overseas respondents seem to be of a more technical control nature, due primarily to the fact that a number of the technical control functions are being performed by commercial companies in the CONUS.

A small number of task differences were noted between CONUS and overseas incumbents. For example, a larger number of overseas personnel reported spending time on such tasks as adjusting delay equalizers, performing harmonic distortion tests, and performing single tone interference tests, while a greater number of CONUS personnel reported spending time performing fault isolation on circuits using red digital patch bays and coordinating cryptographic synchronizations. Table 37 provides a list of those tasks which best differentiate between the CONUS and overseas incumbents.

A comparison of the background data reveals that a slightly larger percentage of CONUS personnel were in their first enlistment (54 percent versus 47 percent) while the average paygrade was still about the same (E-4). Overseas respondents, however, reported performing a greater average number of tasks than those in the CONUS (70 versus 57). In addition, a greater percentage of overseas personnel found their job interesting than those who were stationed in the CONUS (72 percent versus 62 percent), and are planning to reenlist (47 percent versus 28 percent). Table 38 lists the differences in job satisfaction and background information for the two groups.

TABLE 37

TASKS BEST DISTINGUISHING DAFSC 30750 OVERSEAS AND CONUS PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS	CONUS PERSONNEL (N=246)	OVERSEAS PERSONNEL (N=486)	DIFFERENCE
PERFORM FAULT ISOLATION ON CIRCUITS USING RED DIGITAL PATCH BAYS	47	22	+25
COORDINATE CRYPTOGRAPHIC SYNCHRONIZATIONS	49	36	+13
USE AUTOMATIC SECURE VOICE COMMUNICATIONS (AVTOSEVOCOMM)	18	6	+12
PERFORM FAULT ISOLATION ON CIRCUITS USING BLACK DIGITAL PATCH BAYS	58	47	+11
LAY CABLES	16	5	+11
PERFORM BIT ERROR RATE TESTS ON DIGITAL CIRCUITS	37	26	+11
SCORE TESTS	16	5	+11
MAKE IN-SERVICE OR OUT-OF-SERVICE QUALITY CHECKS ON HIGH FREQUENCY (HF) OR INDEPENDENT SIDEBAND (ISB) SYSTEMS	25	14	+11
ADMINISTER TESTS	17	6	+11
DETERMINE OPTIMUM OPERATING FREQUENCY FOR HIGH FREQUENCY (HF) COMMUNICATIONS	20	10	+10
INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	23	13	+10
ERECT OR DISMANTLE TENTS	14	4	+10
ADJUST DELAY EQUALIZERS	14	49	-35
PERFORM HARMONIC DISTORTION TESTS	37	49	-32
PERFORM SINGLE TONE INTERFERENCE TESTS (GROSS TALK TESTS)	22	54	-32
PERFORM MAXIMUM NET LOSS VARIATION TESTS	38	67	-29
PERFORM MAXIMUM CHANGE IN AUDIO FREQUENCY TESTS	40	69	-29
MEASURE CHANGE LEVELS ON BASEBAND SIGNALS	20	48	-28
PERFORM QUALITY ASSURANCE TEST OF AUTOMATIC VOICE NETWORK (AUTOVON) CIRCUITS	10	38	-28
MAKE LINK PERFORMANCE ASSESSMENT (LPA) OR PERFORMANCE MONITORING PROGRAM (PMP) CHECKS	28	56	-28
MEASURE GROUP PILOT LEVELS	18	45	-27
PERFORM BASEBAND SWEEPS	22	49	-27
PERFORM ENVELOPE DELAY DISTORTION TESTS	41	68	-27
REMOVE OR REPLACE SIGNALING UNITS	10	36	-26

TABLE 38

BACKGROUND AND JOB SATISFACTION INFORMATION
FOR DAFSC 30750 CONUS AND OVERSEAS PERSONNEL

	CONUS PERSONNEL	OVERSEAS PERSONNEL
AVERAGE NUMBER OF TASKS PERFORMED:	57	70
AVERAGE PAYGRADE:	E-4	E-4
AVERAGE MONTHS TAFMS:	62	64
PERCENT IN FIRST ENLISTMENT:	54%	47%
JOB SATISFACTION DATA:		
PERCENT FINDING THEIR JOB INTERESTING	62%	72%
PERCENT PERCEIVING THEIR TALENTS ARE UTILIZED AT LEAST FAIRLY WELL	68%	75%
PERCENT PERCEIVING THEIR TRAINING IS UTILIZED AT LEAST FAIRLY WELL	63%	76%
PERCENT PLANNING TO REENLIST	28%	47%
PERCENT WORKING DAY SHIFT:	35%	19%
PERCENT WORKING ROTATING SHIFTS:	33%	62%
PERCENT WORKING AT:		
AUTODIN SWITCHING CENTER	13%	3%
COMBAT COMMUNICATIONS GROUP	12%	1%
DCS TECHNICAL CONTROL FACILITY	25%	40%
PERCENT USING THE FOLLOWING EQUIPMENT:		
CABLE PATCH BAYS	21%	54%
CIRCUIT CONDITIONING EQUIPMENT	48%	72%
GROUP OR SUPERGROUP (WIDEBAND) PATCH BAYS	18%	45%
DIGITAL DATA MODEMS	51%	32%
COMPUTERS	27%	9%
RED DIGITAL PATCH BAYS	55%	28%

TRAINING ANALYSIS

Occupational survey data is just one of the many sources of information which can be used to help make training programs more meaningful and relevant to students. Factors provided in occupational surveys which may be used in evaluating training are percent of first enlistment members performing tasks, utilization of equipment available at the technical school for training, task difficulty ratings, and training emphasis ratings. These factors can be used in evaluating the Specialty Training Standard (STS) and the Plan of Instruction (POI) for the 307X0 specialty. Technical school personnel at Keesler AFB MS matched inventory tasks to areas of instruction outlined in the STS, dated September 1979, and the POI for course E3ABR30730, dated September 1978. A complete computer listing of the percent members performing, task difficulty, and training emphasis ratings for each task statement along with the STS and POI matching has been forwarded to the technical school for their use in reviewing training documents. A summary of that information is described below.

Analysis of Task Difficulty

The relative difficulty of each task in the task inventory was assessed through ratings by 51 experienced 7- and 9-skill level Telecommunications Systems Control NCOs. These tasks were processed to produce an ordered listing of all tasks in terms of their relative difficulty and were standardized to have an average difficulty of 5.0 (standard deviation equals 1.0). (For a more complete description of these ratings, see the Task Factor Administration section in the INTRODUCTION.)

Table 39 lists those tasks rated the most difficulty by a selected sample of senior 307X0 personnel. Most of the tasks are either supervisory or troubleshooting in nature, and seem to involve upper level management or analyzing or isolating malfunctions type tasks. For example, drafting budget or financial requirements or preparing unit emergency or contingency plans seem to be upper level management type tasks, while fault isolating antenna malfunctions or analyzing causes of audio circuit failures are isolating or analyzing type tasks. Overall, few of the most difficult tasks are performed by more than 25 percent of the total 307X0 sample.

Table 40 provides a listing of the most difficult tasks performed by at least 20 percent of the 307X0 total sample, and in addition provides the percentage of first enlistment (1-48 months TAFMS) personnel performing these same tasks. A larger number of these tasks are technical in nature, and include performing envelope delay distortion tests, performing longitudinal balance tests, and adjusting amplitude equalizers. It is interesting to note that many of these more difficult tasks are performed by the same percentages of first enlistment personnel as by the total sample. In other words, some of the more difficult technical tasks are not only performed by experienced 307X0 personnel, but also by fairly recent technical school graduates.

Most of the tasks rated average in task difficulty seem to be related to administration or various types of technical telecommunications tasks (see Table 41). Some of these tasks include preparing NCMO briefings, performing radio orderwire channel noise level measurements, or preparing operational messages. Generally, these tasks are performed by relatively small percentages of 307X0 personnel.

Table 42 lists the tasks rated the least difficult by senior 307X0 personnel. Generally, these tasks involve administration or general maintenance tasks, such as mowing lawns or maintaining grounds, painting facilities, or maintaining master clock log forms (DD Form 1700). Because of the heterogeneity of the 307X0 career ladder, relatively few of these tasks rated the least difficult are performed by more than 40 percent of the career ladder.

Analysis of Training Emphasis

The relative training emphasis of each task in the inventory was assessed through ratings of 45 experienced 7- and 9-skill level Telecommunications Systems Control NCOs. These ratings were processed to produce an ordered listing of all tasks in terms of their recommended emphasis in training for first enlistment personnel. These ratings had an average rating of 3.0 and a standard deviation of 2.0. (For a more complete description of these ratings, see the section on Task Factor Administration in the INTRODUCTION.)

Table 43 lists those tasks which senior 307X0 personnel perceived most needed to be trained. These tasks almost exclusively involve circuit monitoring or analysis or maintaining telecommunications services. Typical tasks rated high in training emphasis include analyzing causes of digital or audio circuit failures, performing fault isolation on analog circuits, or making in-service or out-of-service quality checks on composite signal transmission levels. It is important to note that a majority of 307X0 first enlistment personnel perform most of the tasks rated above average in training emphasis.

A majority of the tasks rated average in training emphasis are primarily administrative or supervisory in nature (see Table 44). Tasks typically rated average in training emphasis include directing compliance with service orders, counseling trainees on training progress, preparing exception reports, or maintaining circuit history folders. Generally, these tasks are performed by substantially fewer first enlistment personnel than the tasks rated the highest in training emphasis.

Finally, Table 45 lists the tasks which were rated the lowest in training emphasis by 307X0 personnel. Generally, these tasks are all supervisory or administrative in nature, and include maintaining nuclear detonation (NUDET) reports, writing civilian performance ratings or supervisory appraisals, evaluating personnel for security reliability, or maintaining force status reports. Overall, the tasks rated the lowest in training emphasis were performed by less than five percent of the first enlistment sample.

Job Difficulty Index (JDI)

Task difficulty ratings and other data can be used to generate a Job Difficulty Index (JDI) which estimates the relative difficulty of the jobs within a specialty. This index can be used to differentiate among the jobs as well as to examine the progression of jobs from simpler entry level work to advance technical and managerial positions.

The JDI for each of the major Telecommunications Systems Control jobs (identified earlier in the CAREER LADDER STRUCTURE section) are displayed in Table 46. An average JDI would be about 13.0. In terms of the relative difficulty of jobs, Circuit Actions NCOs had the most difficulty job (JDI of 19.5) and NCMO personnel had the lowest JDI (4.7).

Circuit Actions NCOs perform an average of 145 tasks and many of these tasks are either supervisory or the more difficult technical tasks, such as preparing APRs, analyzing causes of audio circuit failures, or isolating circuit or system malfunctions. These incumbents perform most of the technical tasks that other major job groups perform in addition to performing supervisory functions at the telecommunications facilities in which they are located.

NCOICs, Quality Control have a JDI of 17.7, which ranks them second in terms of relative job difficulty. Members of this group perform the second highest number of tasks (98); many of which are the more difficult technical tasks. In addition, members of this group perform supervisory tasks which are also relatively difficult. NCOICs, Quality Control also had a high job interest rating, which suggests that these fairly experienced individuals find their job challenging and lead them to feel that their talents and training are being well utilized by the Air Force.

At the other end of the job difficulty spectrum, the lowest JDIs are associated with personnel who spend relatively large amounts of job time performing administrative tasks, and in addition, perform a relatively low number of tasks. Automatic Secure Voice Network Personnel spend 26 percent of their job time performing administrative tasks and perform a low average number of tasks (34). Many of the administrative tasks these incumbents commonly perform are among those rated the least difficult by senior 307X0 personnel. As expected, this group has low job interest and reenlistment intentions.

The cluster of NCMO Personnel had the lowest JDI (4.7). These respondents perform a relatively low number of tasks (29), and spend 71 percent of their job time performing administrative and general telecommunications functions. Many of these tasks were rated the lowest in task difficulty, and include cleaning work areas, receiving or distributing messages, or notifying communications support facilities of severe weather warning calls. Not surprisingly, this group had very low job satisfaction indicators, and do not feel they are being well utilized by the Air Force.

Overall, the Telecommunications Systems Control career ladder has a realistic progression of jobs which appear to vary by experience level and an increasing level of responsibility as the individual progresses in grade and time in the career ladder. However, the low job difficulty and job interest of some groups (Automatic Secure Voice Network Personnel and NCMO Personnel)

suggests that some of the relative junior jobs are fairly routine and uninteresting. For these groups, morale and job satisfaction may be a problem which needs to be reviewed by Telecommunications Systems Control managers. It might be possible to reorganize the work of such individuals and diversify the types of work they are asked to perform.

Analysis of the Specialty Training Standard (STS)

The 307X0 Specialty Training Standard (STS), dated September 1979, was reviewed for 3-, 5-, and 7-skill level Telecommunications Systems Control personnel. Subject matter specialists at the Keesler Technical Training Center assisted in the analysis by matching job inventory tasks to specific paragraphs in the 307X0 STS. Each paragraph in the STS was analyzed using task difficulty, training emphasis, and percent members performing vectors to determine if the paragraph had job inventory justification for being in the STS. Paragraphs which require specific task knowledge and task performance criteria were examined with matched job inventory tasks and task difficulty, training emphasis, and percent members performing information to determine whether the paragraph seemed pertinent in the STS. For the 307X0 specialty, the STS was found to give a broad overview of the career ladder, and all STS paragraphs appear to be well justified based on occupational survey data.

Analysis of the E3ABR30730 Plan of Instruction (POI)

The Plan of Instruction (POI) for course E3ABR30730, dated September 1978, was also reviewed for first enlistment, 3-skill level, and 5-skill level groups. As with the STS, subject matter specialists at the Keesler Technical Training Center also assisted in the analysis by matching job inventory tasks to specific criterion objectives in the E3ABR30730 POI. In addition, each criterion objective was examined based on task difficulty, training emphasis, and percent members performing vectors to determine if the survey data supports the major aspects of the basic 307X0 course. Overall, the POI for the E3ABR30730 course was found to provide comprehensive and accurate training for those personnel entering the 307X0 career ladder.

TABLE 39

TASKS RATED ABOVE AVERAGE IN DIFFICULTY BY DAFSC 307X0 PERSONNEL

TASKS	TASK DIFFICULTY	PERCENT MEMBERS PERFORMING (N=1,289)
DRAFT BUDGET OR FINANCIAL REQUIREMENTS	7.55	6
DRAFT RECOMMENDATIONS FOR SYSTEM IMPROVEMENTS	7.16	15
PREPARE RECOMMENDATIONS FOR AWARDS OR DECORATIONS	7.16	16
PREPARE UNIT EMERGENCY OR CONTINGENCY PLANS	7.13	9
RECONFIGURE AN/TSC 62 VANS	7.12	6
ADJUST DELAY EQUALIZERS	7.10	32
PREPARE APRs	7.08	32
RECONFIGURE AN/TSC 91, 92, OR 93 VANS	7.06	1
ESTABLISH FACILITY PROFICIENCY RATING PROGRAMS	6.97	12
DEVELOP RESIDENT COURSE OR CAREER DEVELOPMENT COURSE (CDC) CURRICULUM MATERIALS	6.95	2
PLAN LAYOUT OF FACILITIES	6.94	10
WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS	6.94	9
FAULT ISOLATE ANTENNA MALFUNCTIONS	6.89	6
EVALUATE BUDGET OR FINANCIAL REQUIREMENTS	6.82	5
ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS (OIs), OR STANDARD OPERATING PROCEDURES (SOPs)	6.80	18
FORMULATE CIRCUIT CUTOVER PLANS	6.80	9
IMPLEMENT CHANGES TO TELECOMMUNICATIONS SYSTEMS	6.78	13
PERFORM SITE SURVEYS	6.77	3
PERFORM ENVELOP DELAY DISTORTION TESTS	6.76	50
CONDUCT ACCEPTANCE TESTING OF NEW SYSTEMS, CIRCUITS, OR EQUIPMENT	6.69	37
DEVELOP WORKING AGREEMENTS WITH USING AGENCIES OR HOST BASES	6.67	11
SUPERVISE FOREIGN NATIONALS	6.64	4
ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	6.63	56
EVALUATE INDIVIDUALS FOR PROMOTION, DEMOTION, OR RECLASSIFICATION	6.62	14
ANALYZE CAUSES OF DIGITAL CIRCUIT FAILURES	6.62	52

TABLE 40

REPRESENTATIVE TASKS RATED ABOVE AVERAGE IN DIFFICULTY AND PERFORMED
GREATER THAN TWENTY PERCENT OF THE 307X0 TOTAL SAMPLE

TASKS	DIFFICULTY	PERCENT OF 307X0 FIRST ENLISTMENT PERFORMING (N=414)	307X0 SAMPL PERFORMING (N=1,289)
ADJUST DELAY EQUALIZERS	7.10	37	32
PREPARE APRS	7.08	*	32
PERFORM ENVELOPE DELAY DISTORTION TESTS	6.76	66	50
CONDUCT ACCEPTANCE TESTING OF NEW SYSTEMS, CIRCUITS, OR EQUIPMENT	6.69	41	38
ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	6.63	66	56
ANALYZE CAUSES OF DIGITAL CIRCUIT FAILURES	6.62	64	52
COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	6.62	5	31
DEVELOP WORK METHODS OR PROCEDURES	6.57	12	28
IDENTIFY TYPES OF INTERFERENCE OF COMMUNICATIONS SYSTEMS	6.56	36	29
SUPERVISE APPRENTICE TELECOMMUNICATIONS SYSTEMS CONTROL SPECIALISTS (AFSC 30730)	6.53	12	26
PERFORM FAULT ISOLATION ON FACSIMILE TRANSMISSIONS	6.41	31	25
ADJUST AMPLITUDE EQUALIZERS	6.41	33	27
PERFORM LONGITUDINAL BALANCE TESTS	6.38	39	30
ISOLATE CIRCUIT OR SYSTEM MALFUNCTIONS	6.35	34	29
PERFORM FAULT ISOLATION ON FREQUENCY DIVISION MULTIPLEX (FDM) SYSTEMS	6.32	33	28
DIRECT FAULT ISOLATION OR CORRECTION OF CIRCUIT OR SYSTEM MALFUNCTIONS	6.30	26	39
COORDINATE SPECIAL COMMUNICATIONS REQUIREMENTS WITH USERS OR DCA	6.21	10	20
PERFORM QUALITY ASSURANCE TEST OF AUTOMATIC VOICE NETWORK (AUTOVON) CIRCUITS	6.18	34	24
PREVENT SYSTEM OUTAGES OR DEGRADATIONS USING PERFORMANCE MONITORING DATA	6.17	25	21
PERFORM FAULT ISOLATION ON ANALOG CIRCUITS	6.10	64	49
CONDUCT OJT	6.08	20	37
IMPLEMENT TELECOMMUNICATIONS CONTINGENCY PLANS	6.02	23	21

*DENOTES LESS THAN ONE PERCENT

TABLE 41

TASKS RATED AVERAGE IN DIFFICULTY BY DAFSC 307X0 PERSONNEL

TASKS	TASK DIFFICULTY	PERCENT MEMBERS PERFORMIN (N=1,289)
PREPARE NCMO BRIEFINGS	5.05	9
PERFORM QC CHECKS OF DIRECT CURRENT (DC) EQUIPMENT	5.05	20
PERFORM RADIO ORDERWIRE CHANNEL NOISE LEVEL MEASUREMENTS	5.04	9
PREPARE OPERATIONAL MESSAGES	5.03	14
MAKE IN-SERVICE OR OUT-OF-SERVICE QUALITY CHECKS ON FOUR-WIRE TELEPHONE TERMINATING SETS	5.03	26
DEVELOP ORGANIZATIONAL CHARTS	5.02	10
MAINTAIN AUTOMATIC SECURE VOICE COMMUNICATIONS (AUTOSEVOCOMM) NETWORK REPORTS	5.02	3
COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	5.02	64
MAINTAIN CONTINGENCY PLANS	5.02	9
PERFORM CRYPTOGRAPHIC SYNCHRONIZATIONS	5.01	17
ADVISE ON TRAINING AT STAFF LEVEL	5.01	5
EVALUATE WORK SCHEDULES	5.01	15
PLAN WORK ASSIGNMENTS	5.01	22
DETERMINE OPTIMUM OPERATING FREQUENCY FOR HIGH FREQUENCY (HF) COMMUNICATIONS	5.00	11
MEASURE SUPERGROUP PILOT COMMUNICATIONS	5.00	22
DIRECT CIRCUIT OR SYSTEM CHECKS	5.00	37
COORDINATE REQUESTS FOR MAINTENANCE ASSISTANCE	4.99	20
MEASURE AUTOMATIC GAIN CONTROL (AGC) AND CONVERT TO RSL	4.99	17
PREPARE HISTORICAL REPORTS	4.98	12
MEASURE CHANNEL LEVELS ON BASEBAND SIGNALS	4.98	32
MAINTAIN CABLE RECORD FORMS (AFTO FORM 224A)	4.97	3
MAINTAIN CIRCUIT HISTORY FOLDERS	4.97	14
MEASURE SUPERGROUP PILOT FREQUENCIES	4.95	9

TABLE 42

TASKS RATED BELOW AVERAGE IN DIFFICULTY BY DAFSC 307X0 PERSONNEL

TASKS	TASK DIFFICULTY	PERCENT MEMBERS PERFORMED (N=1,289)
MOW LAWNS OR MAINTAIN GROUNDS	1.96	19
CLEAN OR WAX MILITARY VEHICLES	2.12	9
PAINT FACILITIES	2.22	21
PERFORM TIME HACKS ON MASTER STATION CLOCKS	2.40	40
CLEAN WORK AREAS	2.49	69
MAINTAIN MASTER CLOCK LOG FORMS (DD FORM 1700)	2.70	17
MAINTAIN VIP VISITORS LOGS	2.75	12
ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL	2.75	13
NOTIFY COMMUNICATIONS SUPPORT FACILITIES OF SEVERE WEATHER WARNING CALLS	2.86	14
CONTINUITY CHECK PATCH CORDS	2.93	42
MAINTAIN STOCK LEVEL OF FORMS	3.14	7
OPERATE AIR CONDITIONING EQUIPMENT	3.19	7
PICK UP OR DELIVER EQUIPMENT AT PRECISION MEASURING EQUIPMENT LABORATORIES (PMEL)	3.23	9
PERFORM OPERATOR MAINTENANCE ON TELETYPEWRITERS, SUCH AS CHANGING RIBBONS OR REPLACING PAPER	3.25	42
VISIT COMMUNICATIONS FACILITIES FOR FAMILIARIZATION	3.26	38
MAINTAIN VEHICLE CONTROL	3.31	6
RECEIVE OR DISTRIBUTE MESSAGES	3.32	27
SCHEDULE LEAVES OR PASSES	3.33	20
PACK OR UNPACK EQUIPMENT	3.35	14
PERFORM PERIODIC INSPECTIONS OF TOOLS OR SUPPORT EQUIPMENT	3.36	8
MAINTAIN DAILY STANDBY ROSTERS	3.37	5
INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	3.37	16
REPORT ITINERARY OF AFCC COMMANDER, VICE COMMANDER, OR CHIEF OF STAFF	3.40	3
MAINTAIN SECURITY SURVEILLANCE OF AREAS	3.41	7
SCORE TESTS	3.42	11

TABLE 43

TASKS RATED HIGH IN TRAINING EMPHASIS AND PERFORMED
BY DAFSC 307X0 PERSONNEL WITH 1-48 MONTHS TAFMS

TASKS	TRAINING EMPHASIS	PERCENT OF 1-48 MONTHS TAFMS MEMBERS PERFORMING (N=414)
ANALYZE CAUSES OF DIGITAL CIRCUIT FAILURES	7.49	64
ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	7.38	66
PERFORM FAULT ISOLATION ON ANALOG CIRCUITS	7.27	64
PERFORM ENVELOPE DELAY DISTORTION TESTS	7.16	66
PATCH EQUIPMENT, LINES, OR CHANNELS	7.07	79
MAKE IN-SERVICE OR OUT-OF-SERVICE QUALITY CHECKS ON COMPOSITE SIGNAL TRANSMISSION LEVELS	6.98	66
PERFORM HARMONIC DISTORTION TESTS	6.98	60
PERFORM IMPULSE NOISE TESTS	6.87	70
PERFORM AMPLITUDE VERSUS FREQUENCY TESTS (FREQUENCY RESPONSE TESTS)	6.84	64
PERFORM IDLE CHANNEL NOISE TESTS	6.82	79
PERFORM FAULT ISOLATION ON CIRCUITS USING BLACK DIGITAL PATCH BAYS	6.82	54
PERFORM INTERMODULATION DISTORTION TESTS	6.73	30
PERFORM MAXIMUM NET LOSS VARIATION TESTS	6.71	62
PERFORM PHASE JITTER TESTS	6.71	67
ADJUST DELAY EQUALIZERS	6.69	37
PERFORM MAXIMUM CHANGE IN AUDIO FREQUENCY TESTS	6.67	64
MAKE IN-SERVICE OR OUT-OF-SERVICE QUALITY CHECKS ON DIRECT CURRENT (DC) CIRCUITS	6.64	52
ADJUST LINE AMPLIFIERS	6.58	49
PERFORM LONGITUDINAL BALANCE TESTS	6.53	39
PERFORM BASEBAND SWEEPS	6.51	42
MAKE LINK PERFORMANCE ASSESSMENT (LPA) OR PERFORMANCE MONITORING PROGRAM (PMP) CHECKS	6.49	52
PERFORM FAULT ISOLATION ON CIRCUITS USING RED DIGITAL PATCH BAYS	6.49	35
CONDUCT ACCEPTANCE TESTING OF NEW SYSTEMS, CIRCUITS, OR EQUIPMENT	6.47	41
PERFORM BIT ERROR RATE TESTS ON DIGITAL CIRCUITS	6.47	36
ADJUST AMPLITUDE EQUALIZERS	6.44	33

TABLE 44

TASKS RATED AVERAGE IN TRAINING EMPHASIS AND PERFORMED
BY DAFSC 307X0 PERSONNEL WITH 1-48 MONTHS TAFMS

TASKS	TRAINING EMPHASIS	PERCENT OF 1-48 MONTHS TAFMS MEMBERS PERFORMING (N=414)
DIRECT COMPLIANCE WITH SERVICE ORDERS	3.13	7
PERFORM QC CHECKS OF POWER SUPPLIES	3.13	6
DIRECT QUALITY CONTROL PROGRAMS	3.11	10
PREPARE WORK ORDER REQUESTS	3.11	32
PERFORM SERVICE OBSERVING TESTS	3.11	14
COORDINATE OPERATIONAL CHANGES TO CIRCUITS OR CHANNELS WITH USERS OR DEFENSE COMMUNICATIONS AGENCY (DCA)	3.04	8
COUNSEL TRAINEES ON TRAINING PROGRESS	3.04	5
RATE PROGRESS OF INDIVIDUALS IN TRAINING	3.04	1
IMPLEMENT ACTIVATION OR CHANGES OF CIRCUITS	3.04	9
PREPARE MEACONING, INTRUSION, JAMMING, AND INTERFERENCE (MIJI) REPORTS	3.04	6
MANUALLY SWITCH AUTOMATIC MICROWAVE ALLOCATIONS	3.00	5
PERFORM TRIBUTARY TIMING COMPARISON CHECKS	3.00	5
VISIT COMMUNICATIONS FACILITIES FOR FAMILIARIZATION	2.98	37
PREPARE EXCEPTION REPORTS	2.93	3
TYPE FORMS, REPORTS, OR CORRESPONDENCE	2.93	39
MAINTAIN CIRCUIT HISTORY FOLDERS	2.91	6
PARTICIPATE IN ALERTS OR RECALLS	2.91	39
PERFORM OPERATIONAL CHECKS OF FIXED OR BACKUP POWER SOURCES	2.91	8
PREPARE IN-EFFECT REPORTS	2.87	4
PREPARE DELAYED SERVICE REPORTS	2.84	4
CONDUCT PERFORMANCE ASSESSMENT OF TACTICAL OR MOBILE COMMUNICATIONS SYSTEMS	2.84	5
PREPARE HISTORICAL REPORTS	2.82	7
MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	2.82	4
INDOCTRINATE NEWLY ASSIGNED PERSONNEL	2.80	12
COORDINATE POWER OUTAGES OR EXERCISES WITH POWER PRODUCTION FACILITIES	2.78	14

TABLE 45

TASKS RATED LOW IN TRAINING EMPHASIS AND PERFORMED
BY DAFSC 307X0 PERSONNEL WITH 1-48 MONTHS TAFMS

TASKS	TRAINING EMPHASIS	PERCENT OF 1-48 MONTHS TAFMS MEMBERS PERFORMING (N=414)
SUPERVISE TELECOMMUNICATIONS SYSTEMS CONTROL SUPERINTENDENTS (DAFSC 30790)	.22	*
WRITE CIVILIAN PERFORMANCE RATINGS OR SUPERVISORY APPRAISALS	.29	*
MAINTAIN NUCLEAR DETONATION (NUDET) REPORTS	.31	*
MAINTAIN MILITARY AFFILIATED RADIO SYSTEM (MARS) FACILITY SUMMARY REPORTS	.36	*
MAINTAIN LINCOMPEX REPORTS	.38	1
MAINTAIN INVENTORY OF ALL MISSION ESSENTIAL END ITEMS	.40	1
MAINTAIN FORCE STATUS REPORTS	.44	*
ASSIGN RESIDENT COURSE INSTRUCTORS	.47	*
CONDUCT SPEED-OF-SERVICE SURVEYS	.49	*
PERFORM OPERATIONAL EVALUATIONS OF MOBILE UNITS	.53	*
MAINTAIN VITAL INTELLIGENCE SIGHTING REPORTS	.56	*
EVALUATE PERSONNEL FOR SECURITY RELIABILITY	.58	1
MAINTAIN INTELLIGENCE DAMAGE REPORTS	.62	*
INVESTIGATE ACCIDENTS OR INCIDENTS	.64	*
PREPARE UNIT EMERGENCY OR CONTINGENCY PLANS	.67	1
DEVELOP RESIDENT COURSE OR CAREER DEVELOPEMENT COURSE (CDC) CURRICULUM MATERIALS	.69	1
SCHEDULE LEAVES OR PASSES	.73	2
ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS (OIs), OR STANDARD OPERATING PROCEDURES (SOPs)	.78	3
MAINTAIN COMMUNICATIONS-ELECTRONIC DAMAGE REPORTS	.82	1
EVALUATE JOB DESCRIPTIONS	.84	1
EVALUATE CLASSROOM INSTRUCTIONS	.89	*
OPERATE MESSAGE PROCESSING CENTERS (MPC)	.91	2
EVALUATE SUGGESTIONS	.91	1
SUPERVISE PERSONNEL WITH AFSCs OTHER THAN AFSC 307X0	1.00	1
PLAN BRIEFINGS	1.02	4

* DENOTES LESS THAN ONE PERCENT

TABLE 46

JOB DIFFICULTY INDICES FOR CAREER LADDER GROUPS

CLUSTER AND INDEPENDENT JOB TYPES	ATDPUTS*	NUMBER OF TASKS PERFORMED	JOB DIFFICULTY INDEX
DCS TECHNICAL CONTROL FACILITY PERSONNEL	4.93	86	15.6
SENIOR WIDEBAND AND AUTOVON SWITCHING PERSONNEL	4.98	83	15.7
WIDEBAND AND AUTOVON SWITCHING PERSONNEL	4.84	49	10.9
CIRCUIT QUALITY CONTROL PERSONNEL	4.90	64	13.1
NCOICs, QUALITY CONTROL	5.02	98	17.7
MICROWAVE AND INDEPENDENT SIDEBAND PERSONNEL	4.67	41	8.7
SHIFT SUPERVISORS	5.15	76	16.0
INSTRUCTORS	5.16	47	12.6
CIRCUIT ACTIONS NCOs	5.06	145	19.5
TACTICAL UNIT PERSONNEL	4.79	91	14.8
SATELLITE TCF PERSONNEL	4.72	38	8.6
AUTODIN SWITCHING CENTER PERSONNEL	4.85	30	8.5
AUTOMATIC SECURE VOICE NETWORK PERSONNEL	4.66	34	7.7
COMPUTER/MODEM CIRCUIT ANALYSIS PERSONNEL	4.90	39	9.9
NETWORK CONTROLLERS	5.05	28	9.4
AFGWC PATCH AND TEST PERSONNEL	4.84	27	8.0
SATELLITE NETWORK CONTROLLERS	4.85	42	10.1
TELECOMMUNICATIONS SUPERVISORS	5.23	74	16.2
FIRST-LINE SUPERVISORS	5.25	41	12.4
CIRCUIT ACTIONS MANAGERS	5.07	39	11.0
STAFF ADMINISTRATIVE PERSONNEL	5.35	20	10.2
STAFF QUALITY CONTROL PERSONNEL	5.66	20	12.2
QUALITY CONTROL NCOs	4.92	47	11.1
PERFORMANCE MONITOR PROGRAM MANAGERS	5.05	28	9.4
TRAINING NCOICs	5.21	33	11.1
RESIDENT COURSE INSTRUCTORS	5.06	31	9.7
CIRCUIT ANALYSIS NCOs	5.08	16	7.9
NCMO PERSONNEL	4.32	29	4.7

* ATDPUTS - AVERAGE TASK DIFFICULTY PER UNIT TIME SPENT

ANALYSIS OF LEVEL OF ASSIGNMENT GROUPS

An examination of the eight most frequently reported levels of assignment (command level, area level, group level, squadron level, detachment level, operating level, and an "other" level) reveals the personnel working at three of these assignment levels typically perform tasks which are somewhat unique. These three unique assignment levels include the personnel working at the area level, detachment level, and the "other" level. The types of tasks which differentiate these personnel are very similar to NCMO personnel, Wideband and Autovon Switching Personnel, and Staff Administrative Personnel identified in the CAREER LADDER STRUCTURE section. For example, NCMO Personnel perform primarily an administrative job, and have a high percentage of personnel working at the area level. In the level of assignment analysis, those personnel working at the area level were also found to be performing an administrative job. Similar results can be found for the other two level of assignment groups identified as performing unique tasks.

In order to provide duty, task, background, and job satisfaction information for the eight level of assignment groups, four tables are provided at the end of this section. Table 47 provides the relative percent time spent on duties by level of assignment groups, and reveals which duty areas various level of assignment groups tend to concentrate on. For example, area level personnel spend 24 percent of their job time performing administrative functions. Table 48 lists the tasks which best differentiate area level, detachment level, and "other" level personnel and reveals a high percentage of detachment level personnel perform wideband tasks. Table 49 provides various background information, such as DAFSC distribution, work shift, and average paygrade for all level of assignment groups. For example, only 33 percent of command level personnel are stationed overseas and 60 percent work a day shift. Table 50 provides job satisfaction information for level of assignment groups, and reveals the personnel assigned to the area level are the least satisfied. Finally, a brief job description for the three level of assignment groups identified as performing unique tasks is provided below.

Area Level Personnel

Area level personnel spend 24 percent of their job time performing administrative tasks, which is a higher percentage of job time than any other level of assignment group. This same trend is found in Table 48, where administrative tasks, such as receiving or distributing messages or maintaining mission impairment reports, are performed by relatively high percentages of area level personnel. These incumbents perform a job very similar to NCMO Personnel identified in the CAREER LADDER STRUCTURE section, since both area level personnel and NCMO Personnel perform many of the same tasks. A review of background information for area level personnel reveals these incumbents are rather senior, averaging 169 months TAFMS and 81 percent hold the 7- or 9- skill level. These incumbents appear to be the least satisfied of all level of assignment groups, with only 54 percent finding their job interesting and 47 percent perceiving their training is being utilized at least fairly well.

Detachment Level Personnel

The 190 personnel working at the detachment level spend more time performing wideband type tasks (11 percent) than all other level of assignment groups. This trend is again reflected in Table 48, where wideband systems performance monitoring tasks, such as determining link status, performing baseband sweeps, and measuring channel levels on baseband signals are performed by a majority of the personnel assigned to the detachment level. It is interesting to note that these incumbents perform a job very similar to Wideband and Autovon Switching Personnel identified in the CAREER LADDER STRUCTURE section, since a high percentage of both these personnel and detachment level personnel perform wideband related tasks. An examination of background and job satisfaction indicators reveals 88 percent of detachment level personnel are stationed overseas, 57 percent work rotating shifts, and 72 percent find their job interesting.

"Other" Level Personnel

The 24 respondents assigned to an "other" level perform a job very similar to the Staff Administrative Personnel identified in the CAREER LADDER STRUCTURE section. Differentiating tasks for these incumbents are primarily supervisory in nature, and include developing Job Proficiency Guides (JPG), formulating circuit cutover plans, or drafting budget or financial requirements. A review of background information for "other" level respondents reveals they are rather senior, with 71 percent holding the 7- or 9- skill level and having an average paygrade of E-6. Job satisfaction indicators reveal these respondents are rather motivated, with 88 percent finding their job interesting and 67 percent planning to reenlist.

Summary

Overall, the jobs and tasks performed vary little across all eight level of assignment groups. However, three groups, (area, detachment, and "other") were found to be performing distinct tasks involving administration, wideband performance monitoring, or supervision. In addition, these three unique groups were found to be performing jobs similar to some of the major job groups identified in the CAREER LADDER STRUCTURE section. Finally, job satisfaction indicators seem to vary little between different levels of assignment.

TABLE 47

RELATIVE PERCENT TIME SPENT ON DUTIES BY LEVEL OF ASSIGNMENT GROUPS

DUTIES	COMMAND LEVEL PERSONNEL (N=72)	AREA LEVEL PERSONNEL (N=36)	GROUP LEVEL PERSONNEL (N=511)	SQUADRON LEVEL PERSONNEL (N=320)	DETACHMENT LEVEL PERSONNEL (N=190)	OPERATING LEVEL PERSONNEL (N=60)	"OTHER" LEVEL PERSONNEL (N=24)
ORGANIZING AND PLANNING	8	11	6	5	4	5	13
DIRECTING AND IMPLEMENTING	22	(24)	12	10	10	12	21
INSPECTING AND EVALUATING	8	9	4	3	3	4	11
TRAINING	6	6	6	6	4	4	6
PERFORMING ADMINISTRATIVE FUNCTIONS	(21)	(24)	15	12	10	12	11
PERFORMING CIRCUIT MONITORING AND ANALYSIS	10	7	22	23	(29)	26	11
PERFORMING WIDEBAND SYSTEMS PERFORMANCE MONITORING AND ANALYSIS	1	2	5	5	(11)	6	1
MAINTAINING TELECOMMUNICATIONS SERVICE	11	7	20	22	19	21	14
ERECTING AND MAINTAINING TACTICAL AND COMBAT COMMUNICATIONS EQUIPMENT AND FACILITIES	2	*	4	7	4	3	2
PERFORMING GENERAL TELECOMMUNICATIONS FUNCTIONS	10	11	7	7	6	7	10

*DENOTES LESS THAN ONE PERCENT

TABLE 48

TASKS WHICH BEST DIFFERENTIATE LEVEL OF ASSIGNMENT GROUPS
(PERCENT MEMBERS PERFORMING)

TASKS	COMMAND LEVEL PERSONNEL	AREA LEVEL PERSONNEL	GROUP LEVEL PERSONNEL	SQUADRON LEVEL PERSONNEL	DETACHMENT LEVEL PERSONNEL	OPERATING LEVEL PERSONNEL	"OTHER" LEVEL PERSONNEL
MAINTAIN MISSION IMPAIRMENT REPORTS	17	33	8	8	4	2	4
MAINTAIN WEATHER CIRCUITS OR EQUIPMENT REPORTS	7	25	7	7	3	7	4
RECEIVE OR DISTRIBUTE MESSAGES	33	58	26	26	27	28	8
REPORT ITINERARY OF AFCC COMMANDER, VICE COMMANDER OR CHIEF OF STAFF	8	28	4	2	3	0	0
ADJUST DELAY EQUALIZERS	6	3	29	32	59	30	4
ADJUST ECHO SUPPRESSORS	3	0	12	14	45	18	0
OPERATE SECONDARY TESTBOARDS	1	0	8	12	50	8	0
DETERMINE LINK STATUS	7	6	28	36	52	27	8
MEASURE CHANNEL LEVELS ON BASEBAND SIGNALS	4	3	28	30	66	37	0
PERFORM BASEBAND SWEEPS	4	3	31	30	68	42	0
DRAFT RECOMMENDATIONS FOR SYSTEM IMPROVEMENTS	26	25	12	14	14	5	42
DRAFT BUDGET OR FINANCIAL REQUIREMENTS	8	3	5	5	4	5	33
FORMULATE CIRCUIT CUTOVER PLANS	6	6	8	10	8	3	25
ESTABLISH REQUIREMENTS FOR PUBLICATIONS FILES	10	6	11	11	9	10	25
PREPARE REQUISITIONS FOR EQUIPMENT OR SUPPLIES	13	3	13	14	11	10	29
DEVELOP JC3 PROFICIENCY GUIDES (JPG)	10	11	12	14	9	8	29

TABLE 49

BACKGROUND INFORMATION FOR LEVEL OF ASSIGNMENT GROUPS

	COMMAND LEVEL PERSONNEL	AREA LEVEL PERSONNEL	GROUP LEVEL PERSONNEL	SQUADRON LEVEL PERSONNEL	DETACHMENT LEVEL PERSONNEL	OPERATING LEVEL PERSONNEL	"OTHER" LEVEL PERSONNEL
AVERAGE NUMBER OF TASKS PERFORMED:	38	33	65	74	77	66	45
AVERAGE PAYGRADE:	E-6	E-6	E-5	E-4	E-4, E-5	E-4, E-5	E-6
AVERAGE MONTHS TAFMS:	159	169	93	85	89	83	148
PERCENT LOCATED OVERSEAS:	33%	67%	55%	70%	88%	80%	50%

DAFSC:

30730	3%	5%	10%	13%	7%	15%	-
30750	25%	14%	62%	60%	65%	65%	29%
30770	61%	64%	25%	26%	26%	18%	58%
30790	10%	17%	3%	1%	2%	2%	13%
CEM CODE 30700	1%	-	-	-	-	-	-

WORK SHIFT:

DAY SHIFT	60%	56%	33%	37%	24%	33%	54%
SWING SHIFT	3%	3%	3%	2%	2%	2%	-
MID SHIFT	7%	3%	3%	3%	3%	3%	4%
12-HOUR DAY SHIFT	1%	-	3%	1%	4%	2%	-
12-HOUR NIGHT SHIFT	1%	-	1%	1%	2%	2%	-
ROTATING SHIFTS	17%	28%	49%	45%	57%	45%	25%

TABLE 50

JOB SATISFACTION DATA FOR LEVEL OF ASSIGNMENT GROUPS
(PERCENT MEMBERS RESPONDING)

	COMMAND LEVEL	AREA LEVEL	GROUP LEVEL	SQUADRON LEVEL	DETACHMENT LEVEL	OPERATING LEVEL	"OTHER" LEVEL
	PERSONNEL	PERSONNEL	PERSONNEL	PERSONNEL	PERSONNEL	PERSONNEL	PERSONNEL
I FIND MY JOB:							
NO RESPONSE	1	-	1	1	1	-	-
DULL	17	29	13	11	11	17	8
SO-SO	13	17	15	16	16	17	4
INTERESTING	69	(54)	71	72	72	66	88
MY JOB UTILIZES MY TALENTS:							
NO RESPONSE	-	-	1	1	-	-	-
NOT AT ALL TO VERY LITTLE	29	42	23	22	26	22	17
FAIRLY WELL OR BETTER	71	58	76	77	74	78	83
MY JOB UTILIZES MY TRAINING:							
NO RESPONSE	-	-	-	1	1	-	-
NOT AT ALL TO VERY LITTLE	38	53	24	31	22	22	38
FAIRLY WELL OR BETTER	62	(47)	76	68	77	78	62
I PLAN TO REENLIST:							
NO RESPONSE	1	-	1	2	-	2	-
NO OR PROBABLY NO	43	39	52	54	52	53	33
YES OR PROBABLY YES	56	61	(47)	(44)	(48)	(45)	67

ANALYSIS OF WORK SHIFT GROUPS

An examination of the eight most frequently reported work shifts (day shift, swing shift, mid shift, 12 hour night shift, 12 hour day shift, rotating shift, variable shift, and "other" shift) reveals unique types of jobs are performed by the personnel who work a day shift, rotating shift, or variable shift. Interestingly, the types of jobs performed by these three work shift groups corresponds closely with various major job groups reported in the CAREER LADDER STRUCTURE section. For example, Telecommunications Supervisors perform primarily a supervisory job, and have a high percentage of personnel working a day shift. In the work shift analysis, those personnel working a day shift are differentiated due to the supervisory tasks they perform. Similar results can be found for the other two work shift groups identified as performing unique tasks. Finally, it is interesting to note that the three work shift groups discussed in detail in this section are also the shifts most frequently performed by 307X0 personnel.

In order to provide task and background information for all eight work shift groups and to help clarify the job differences of the three "unique" work shift groups, four tables are provided at the end of this section. Table 51 provides the relative percent time spent performing duties, and reveals which duty areas various work shift personnel tend to concentrate on. For example, swing shift personnel spend 14 percent of their job time performing administrative functions, while mid shift personnel spend 33 percent of their job time maintaining telecommunications service. Table 52 lists the tasks which best differentiate day shift, rotating shift, and variable shift personnel. For example, tactical communications tasks are performed by higher percentages of variable shift personnel than any other work shift group. Table 53 provides various background information for all eight work shift groups. Some of the types of information Table 53 provides includes the average number of tasks performed, percent located overseas, DAFSC distribution, and the percentage of 307X0 personnel working at various telecommunications facilities. Job satisfaction data for work shift groups is presented in Table 54, and reveals that only 28 percent of swing shift personnel plan to reenlist. Finally, in addition to the information provided in Tables 51-54, brief job descriptions for the three work shift groups performing differentiating tasks are provided below.

Day Shift Personnel

The incumbents working a day shift seem to be primarily supervisors, with these incumbents spending approximately 50 percent of their job time on supervisory duties. The tasks which best differentiate these incumbents are also supervisory in nature, and include interpreting policies or directives for subordinates, maintaining daily read files, or indorsing APRs. An examination of background information reveals these respondents have the highest average months TAFMS (139), and 57 percent hold the 7-skill level or better. The type of job performed by these personnel is very similar to that of Telecommunications Supervisors identified in the CAREER LADDER STRUCTURE section, most of whom also reported working a day shift. These respondents seem fairly satisfied with their job, with 78 percent perceiving their job utilizes their talents at least fairly well and 74 percent finding their job interesting.

Rotating Shift Personnel

The 562 personnel working a rotating shift make up approximately 45 percent of the total 307X0 sample. Rotating shift personnel seem to be primarily involved with technical telecommunications tasks, and tend to concentrate on performing circuit monitoring and analysis or maintaining telecommunications services. Tasks which best differentiate these incumbents tend to be related to circuit monitoring and analysis, and include performing harmonic distortion tests, operating secondary testboards, and performing single tone interference tests (cross talk test). Interestingly, many of the clusters and independent job types identified in the Circuit Monitoring and Analysis functional area, such as DCS Technical Control Facility Personnel or Wideband and Autovon Switching Center Personnel typically perform these same tasks. In addition, a further review of the CAREER LADDER STRUCTURE section reveals most of the major job groups identified in this functional area typically work a rotating shift.

Variable Shift Personnel

These 79 respondents perform a job very similar to Tactical Unit Personnel identified in the CAREER LADDER STRUCTURE section. Variable Shift Personnel spend 11 percent of their job time erecting and maintaining tactical equipment, which is a higher percentage of job time than all other work shift groups. Differentiating tasks performed by these incumbents also are primarily tactical communications related, and include laying cables, loading or unloading mobile communications equipment, or operating AN/TSC 60 van remote heads. A review of the background information for variable shift incumbents reveals that the highest percentage of these personnel work in tactical units and 62 percent are located overseas. An examination of job satisfaction data for these respondents reveals that only 38 percent plan to reenlist, which is somewhat low when compared to other work shift groups.

Summary

An analysis of eight major work shift groups reveals only three of the groups (day shift, rotating shift, and variable shift) are performing relatively distinct tasks and jobs. In addition, these three work shift groups are performing similar tasks as several major job groups identified in the CAREER LADDER STRUCTURE section. Day shift personnel seem to fulfill a supervisory role and perform a job similar to Telecommunications Supervisors (a majority of which work a day shift). Rotating shift personnel concentrate on performing circuit monitoring or analysis, and perform a job similar to those personnel found in the Circuit Monitoring and Analysis functional area (a majority of which work a rotating shift). Finally, variable shift personnel are differentiated due to the tactical communications tasks they perform, many of which are also performed by Tactical Unit Personnel (a substantial percentage of which work a variable shift). Overall, the type of shift worked appears to have little impact on job satisfaction indicators.

TABLE 51

RELATIVE PERCENT TIME SPENT ON DUTIES BY WORK SHIFT GROUPS

DUTIES	DAY SHIFT PERSONNEL (N=446)	SWING SHIFT PERSONNEL (N=25)	MID SHIFT PERSONNEL (N=33)	12 HOUR		ROTATING SHIFT PERSONNEL (N=562)	VARIABLE		OTHER SHIFT PERSONNEL (N=62)
				DAY SHIFT PERSONNEL (N=27)	NIGHT SHIFT PERSONNEL (N=12)		SHIFT PERSONNEL (N=79)	SHIFT PERSONNEL (N=79)	
ORGANIZING AND PLANNING	11	*	2	7	2	2	5	4	
DIRECTING AND IMPLEMENTING	20	8	7	15	7	7	13	11	
INSPECTING AND EVALUATING	8	2	2	4	1	1	3	3	
TRAINING	9	4	4	6	6	3	4	6	
PERFORMING ADMINISTRATIVE FUNCTIONS	15	14	13	24	25	12	14	15	
PERFORMING CIRCUIT MONITORING AND ANALYSIS	12	21	25	14	19	31	18	20	
PERFORMING WIDE BAND SYSTEMS PERFORMANCE									
MONITORING AND ANALYSIS	3	3	3	5	7	8	4	7	
MAINTAINING TELECOMMUNICATIONS SERVICE	9	35	33	13	18	25	19	19	
ERECTING AND MAINTAINING TACTICAL AND									
COMBAT COMMUNICATIONS EQUIPMENT AND									
FACILITIES	4	2	4	4	5	4	11	4	
PERFORMING GENERAL TELECOMMUNICATIONS									
FUNCTIONS	8	10	8	8	10	6	10	11	

*DENOTES LESS THAN ONE PERCENT

TABLE 52

TASKS WHICH BEST DIFFERENTIATE WORK SHIFT GROUPS
(PERCENT MEMBERS PERFORMING)

TASKS	DAY SHIFT PERSONNEL	SWING SHIFT PERSONNEL	MID SHIFT PERSONNEL	12 HOUR DAY SHIFT PERSONNEL	12 HOUR NIGHT SHIFT PERSONNEL	ROTATING SHIFT PERSONNEL	VARIABLE SHIFT PERSONNEL	OTHER SHIFT PERSONNEL
INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	39	16	15	30	8	22	28	21
MAINTAIN DAILY READ FILES	29	4	6	19	-	4	11	8
PARTICIPATE IN STAFF MEETINGS	38	4	3	19	-	5	20	13
WRITE CORRESPONDENCE	53	16	3	26	8	6	33	19
INDORSE AIRMAN PERFORMANCE REPORTS (APRS)	27	8	6	19	8	9	10	10
ADJUST DELAY EQUALIZERS	16	24	18	33	33	49	18	23
OPERATE SECONDARY TESTBOARDS	4	4	3	4	-	27	4	8
PERFORM LONGITUDINAL PALANCE TESTS	16	8	9	22	25	48	15	15
PERFORM HARMONIC DISTORTION TESTS	24	28	21	33	50	70	29	34
PERFORM SF OR DUPLEX SIGNALING TESTS ON PRIVATE BRANCH EXCHANGE (PBX) SUBSCRIBER LINES	6	4	9	7	8	31	8	6
PERFORM SINGLE TONE INTERFERENCE TESTS (CROSS TALK TEST)	18	16	15	33	25	58	23	26
PERFORM FAULT ISOLATION ON AUTOVON SWITCHING CENTER EQUIPMENT	4	4	6	4	-	22	5	5
PERFORM FAULT ISOLATION ON AUTOVON SWITCHING CENTER EQUIPMENT	13	-	3	7	8	1	37	10
PERFORM FAULT ISOLATION ON MOBILE COMMUNICATIONS EQUIPMENT	12	-	3	15	8	1	30	10
PERFORM FAULT ISOLATION ON COMMUNICATING EQUIPMENT	10	-	3	7	-	4	27	10
PERFORM FAULT ISOLATION ON REMOTE HEADS EQUIPMENT	9	-	3	11	-	1	28	10
PERFORM FAULT ISOLATION ON TRANSPORT OR AIRCRAFT COMMUNICATIONS EQUIPMENT	11	-	3	11	-	1	30	8
PERFORM FAULT ISOLATION ON TRANSPORT OR AIRCRAFT COMMUNICATIONS EQUIPMENT	11	-	3	11	8	2	24	10

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TABLE 53

BACKGROUND INFORMATION FOR WORK SHIFT GROUPS

TASKS	DAY SHIFT PERSONNEL	SWING SHIFT PERSONNEL	MID SHIFT PERSONNEL	12 HOUR DAY SHIFT PERSONNEL	12 HOUR NIGHT SHIFT PERSONNEL	ROTATING SHIFT PERSONNEL	VARIABLE SHIFT PERSONNEL	OTHER SHIFT PERSONNEL
AVERAGE NUMBER OF TASKS PERFORMED:	63	44	48	76	63	70	68	63
AVERAGE PAYGRADE:	E-5	E-4	E-4	E-5	E-4	E-4	E-4, E-5	E-5
AVERAGE MONTHS TAFMS:	139	67	73	98	64	69	94	85
PERCENT LOCATED OVERSEAS:	55%	16%	15%	70%	75%	76%	62%	73%
DAFSC:								
30730	3%	12%	12%	11%	17%	17%	9%	2%
30750	40%	76%	73%	52%	66%	68%	65%	67%
30770	49%	12%	15%	33%	17%	15%	24%	29%
30790	7%	-	-	4%	-	-	2%	2%
CEM CODE 30700	1%	-	-	-	-	-	-	-
PERCENT WORKING AT:								
AUTODIN SWITCHING CENTER	5%	32%	24%	-	-	6%	1%	-
COMBAT COMMUNICATIONS GROUP	9%	-	-	22%	25%	1%	9%	7%
DCS TECHNICAL CONTROL FACILITY	24%	20%	21%	26%	42%	47%	20%	23%
NMCO	3%	8%	12%	15%	8%	5%	4%	4%
NON-DCS TECHNICAL CONTROL FACILITY	3%	12%	9%	11%	-	3%	8%	15%
SATELLITE TECHNICAL CONTROL FACILITY	3%	16%	21%	-	-	2%	-	-
TACTICAL UNIT	7%	-	-	7%	-	1%	27%	7%
WIDEBAND TECHNICAL CONTROL AND AUTOVON FACILITY	8%	-	-	8%	-	22%	6%	10%

TABLE 54

JOB SATISFACTION DATA FOR WORK SHIFT GROUPS
(PERCENT MEMBERS RESPONDING)

	DAY SHIFT PERSONNEL	SWING SHIFT PERSONNEL	MID SHIFT PERSONNEL	12 HOUR DAY SHIFT PERSONNEL	12 HOUR NIGHT SHIFT PERSONNEL	ROTATING SHIFT PERSONNEL	VARIABLE SHIFT PERSONNEL	OTHER SHIFT PERSONNEL
<u>I FIND MY JOB:</u>								
NO RESPONSE	1	-	3	-	-	-	-	-
DULL	11	16	18	30	25	11	11	26
SO-SO	14	16	6	7	17	16	22	26
INTERESTING	74	68	73	63	58	73	67	(48)
<u>MY JOB UTILIZES MY TALENTS:</u>								
NO RESPONSE	1	-	-	-	-	-	-	-
NOT AT ALL TO VERY LITTLE	21	32	29	33	33	23	28	48
FAIRLY WELL OR BETTER	78	68	72	67	67	77	72	52
<u>MY JOB UTILIZES MY TRAINING:</u>								
NO RESPONSE	1	4	-	-	-	1	-	-
NOT AT ALL TO VERY LITTLE	29	40	33	37	42	22	41	40
FAIRLY WELL OR BETTER	70	56	67	63	58	77	59	60
<u>I PLAN TO REENLIST:</u>								
NO RESPONSE	1	4	-	4	-	1	-	2
NO OR PROBABLY NO	48	(68)	55	48	25	52	62	47
YES OR PROBABLY YES	51	(28)	45	48	75	47	(38)	51

IMPLICATIONS

The Telecommunications Systems Control career ladder is fairly heterogeneous, with a wide variety of jobs performed by 307X0 personnel. However, these jobs can be loosely grouped into two functional areas; Circuit Monitoring and Analysis and Supervision, Training, and Administration. The Circuit Monitoring and Analysis functional area makes up approximately 70 percent of the total career ladder, and members of these groups perform the technical jobs associated with the 307X0 specialty.

The career field has remained relatively stable over the last few years, and no drastic changes are foreseen for the near future. However, the introduction of new satellite communications equipment, digital equipment, and automated communication circuit monitoring and controlling equipment is seen as potentially having an effect on the types of jobs performed by 307X0 personnel, although this effect appears to be slight at this time.

A review of job satisfaction indicators for these incumbents reveals several interesting issues. First, 307X0 personnel appear to find their job more interesting than other related career fields, but fewer 307X0 personnel plan to reenlist. One possible explanation for this phenomenon is the fact that civilian firms are hiring personnel with telecommunications skills. Therefore, many 307X0 personnel may be leaving the Air Force because they perceive civilian firms may offer better job opportunities. Another explanation for the somewhat lower reenlistment intentions of 307X0 personnel could be the large number of remote and overseas assignment possibilities for these incumbents. Approximately 60 percent of all 307X0 assignments are overseas, and many of these are at remote telecommunications sites. Many first or second enlistment personnel may not find the prospect of spending a majority of their Air Force career overseas attractive.

Another issue concerning 307X0 job satisfaction is the routine and narrow job performed by NCMO Personnel (identified in the CAREER LADDER STRUCTURE section). NCMO Personnel perform primarily an administrative job involving the coordination and dispatching of the proper maintenance personnel to correct circuit malfunctions. These incumbents do not find their job interesting, and a majority of these incumbents do not plan to reenlist. A low percentage of NCMO Personnel report their job utilizes their talents or training, which is to be expected since these respondents spend little job time performing circuit monitoring or analysis type tasks. If geographic locations permit, managers may want to explore the possibility of job rotation between NCMO Personnel and 307X0 personnel working a technical job. This would help alleviate some of the boredom of job control for NCMO Personnel, and may help keep highly skilled 307X0 personnel in the Air Force.

Overall, the career ladder appears stable, training documents (AFR 39-1, 307X0 STS and E3ABR30730 POI) appear realistic, and job satisfaction appears good for 307X0 personnel.

APPENDIX A

Job Type Descriptions

Listed below are brief descriptions of the job types identified in the Telecommunications Systems Control career ladder structure. Generally, the relative heterogeneity of job types within any one cluster seems to depend on the cluster itself, with some clusters being very homogeneous and other clusters having fairly heterogeneous job types. For additional information, the tables in Appendix A reveal various duty, background, and job satisfaction data for all of the job types identified. (For a further explanation of the job types identified, see the CAREER LADDER STRUCTURE section of this report.)

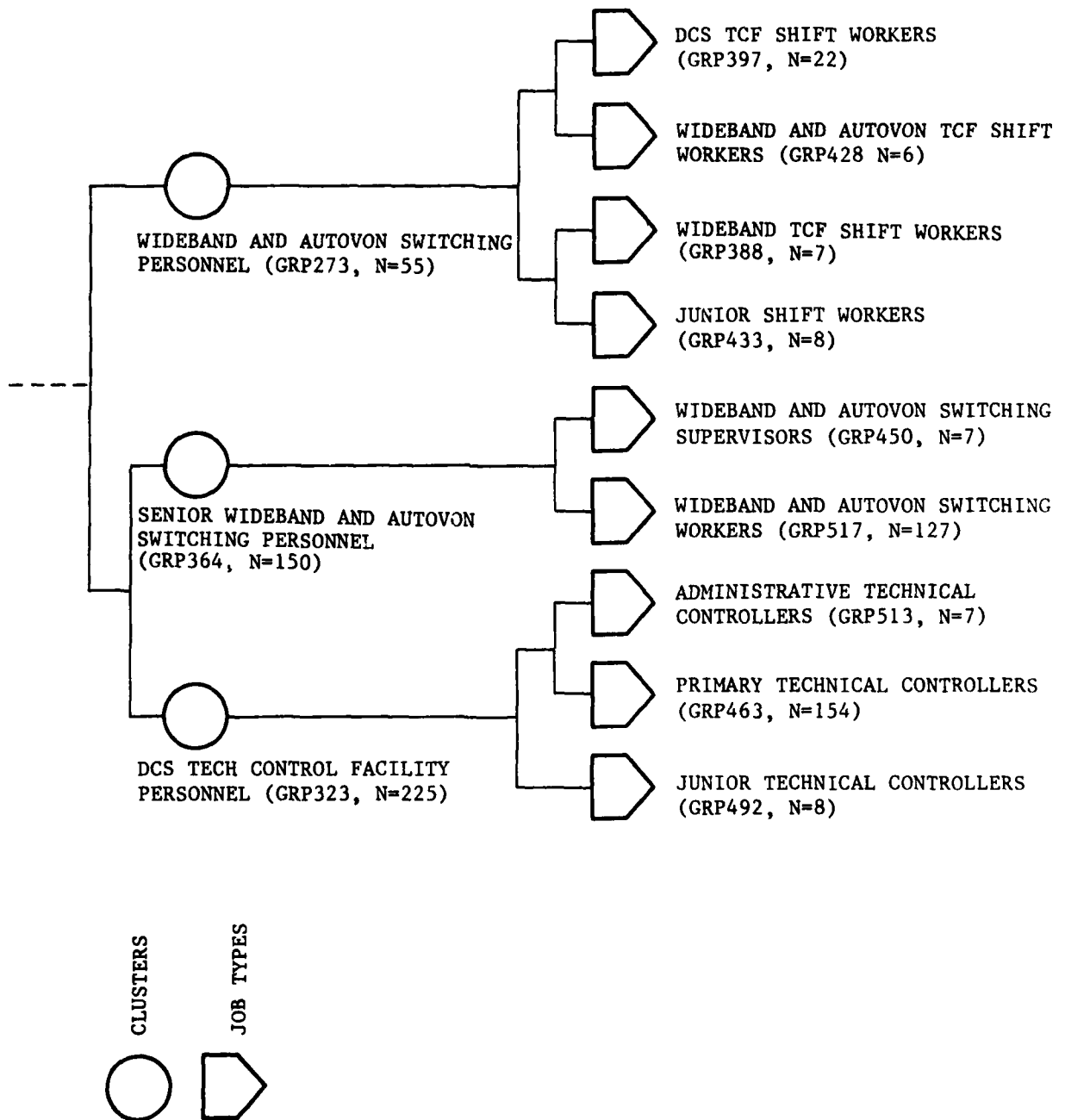
DCS Technical Control Facility Personnel

There are three job types within this cluster (see Figure 3), and the differentiating factors among the job types are the number of tasks performed, the amount of time spent erecting and maintaining tactical equipment and facilities, and the amount of time spent performing administrative functions. Junior Technical Controllers perform a relatively low number of tasks and have a relatively low average months TAFMS (44). These incumbents perform many of the same tasks as the personnel in the other job types in this cluster, but spend more time on routine continuity checking tasks. Typical tasks for these incumbents include checking continuity of cables, checking continuity between local technical controls and users, and patching equipment, lines, or channels. Primary Technical Controllers perform the highest average number of tasks (100) and have the highest average months TAFMS (71). These incumbents are differentiated due to the supervisory and wideband performance monitoring tasks they perform, such as directing circuit or system checks, performing QC checks of audio equipment, or measuring group pilot frequencies. Administrative Technical Controllers are differentiated due to the administrative tasks they perform. Differentiating tasks performed by these personnel include maintaining weather circuits or equipment reports, performing courier actions for controlled or classified materials, or maintaining master clock log forms (DD Form 1700). Additionally, these incumbents have good job satisfaction indicators, with 100 percent finding their job interesting and 100 percent perceiving their job utilizes their talents and training at least fairly well. (For more information about these job types see Tables I, II, and III.)

Senior Wideband and AUTOVON Switching Personnel

There are two job types within this cluster as shown in Figure 3. Wideband and Autovon Switching Workers perform an average of 87 tasks and spend approximately 70 percent of their job time performing technical telecommunications tasks. Differentiating tasks for these 127 personnel include performing SF signaling tests on interswitch trunks (IST), measuring frequency of synchronization pilots, and adjusting echo suppressors. Wideband and Autovon Switching Supervisors perform many of the same technical tasks as the above job type, but in addition spend 25 percent of their job time performing supervisory tasks. Tasks commonly performed by these incumbents include maintaining training records, charts, or graphs, preparing

FIGURE 3



APRs, or supervising Telecommunications Systems Control Specialists (AFSC 30750). These incumbents seem somewhat dissatisfied with their job, with only 43 percent perceiving their job interesting and only 43 percent planning to reenlist. (For more information about these job types see Tables I, II and III.)

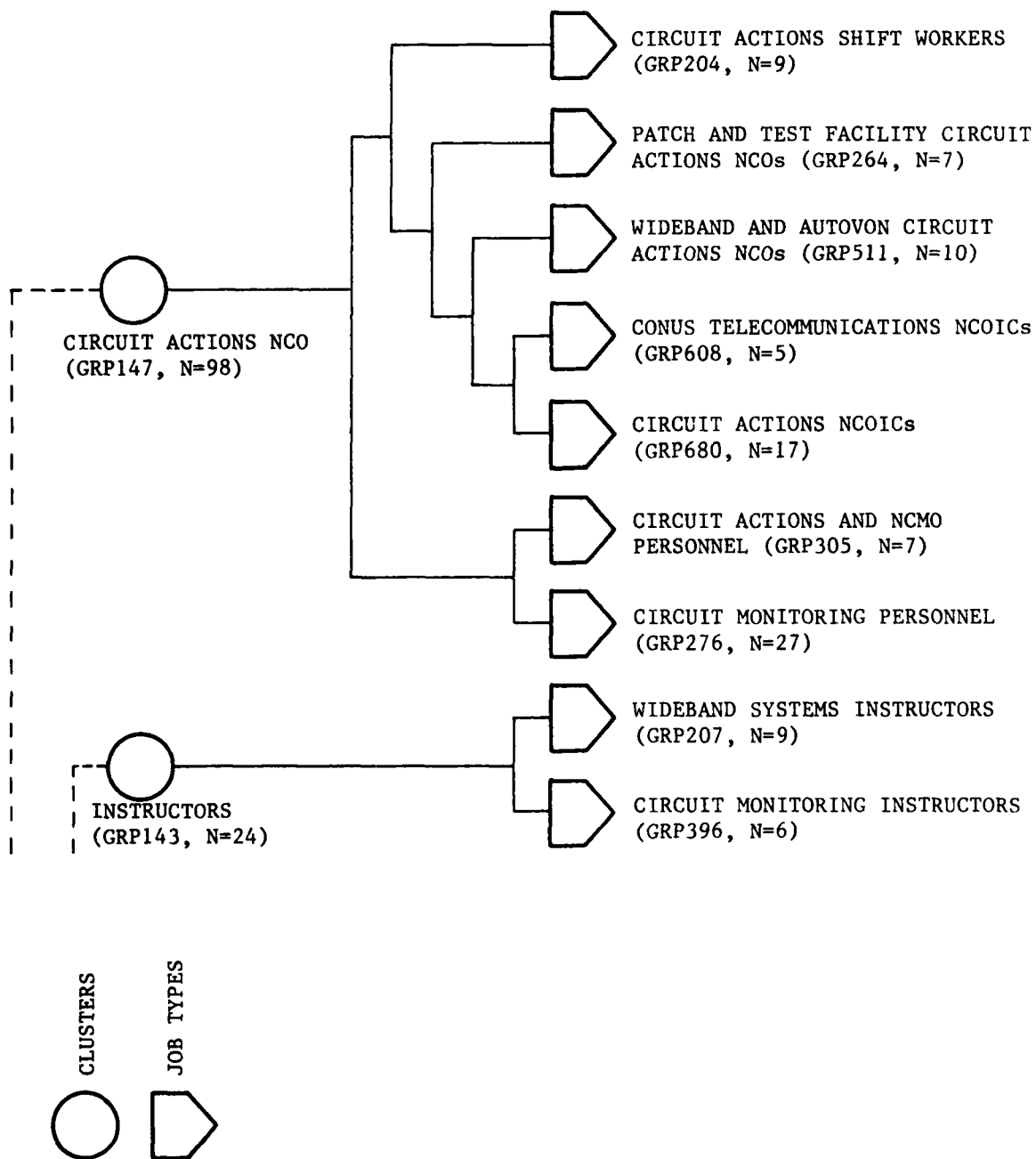
Wideband and AUTOVON Switching Personnel

The four job types in this cluster are relatively homogeneous, with all of these personnel spending at least 50 percent of their job time performing circuit monitoring, wideband performance monitoring, and maintaining telecommunications service tasks (see Figure 3). Junior Shift Workers have the lowest average paygrade (E-3) and only average 34 months TAFMS. These incumbents perform many of the same tasks as DCS Technical Control Facility Personnel, and perform such tasks as performing longitudinal balance tests, performing phase jitter tests, or directing alternate routing of circuits. Wideband Technical Control Facility Shift Workers work primarily at Wideband TCFs. These incumbents are differentiated due to the large amount of job time spent performing wideband performance monitoring and analysis, and typical tasks include measuring Automatic Gain Control (AGC) and convert to RSL, determining link status, and measuring levels of synchronization pilots. Only 43 percent of these incumbents find their job interesting, but 57 percent plan to reenlist. Wideband and AUTOVON TCF Shift Workers perform the lowest average number of tasks (39) and none of these personnel are stationed in CONUS. Differentiating tasks for these incumbents seem to involve signaling units, and include adjusting signaling units, removing or replacing signaling units, or performing SF or duplex signaling tests on Private Branch Exchange (PBX) subscriber lines. These incumbents seem fairly satisfied with their job, with 100 percent perceiving their job interesting and 100 percent perceiving their job utilizes their training at least fairly well. DCS Technical Control Facility Shift Workers also perform tasks similar to DCS Technical Control Facility Personnel but perform substantially fewer tasks. Typical tasks for these respondents include making quality checks on standard test tone levels, making equipment loop-backs, or analyzing causes of digital circuit failures. (For more information about these job types see Tables I, II and III.)

Instructors

Figure 4 reveals there are two heterogeneous job types within this cluster. Circuit Monitoring Instructors spend a large amount of their job time on training and circuit monitoring and analysis tasks, such as performing impulse noise tests, performing phase jitter tests, and performing terminal impedance tests. Wideband Systems Instructors spend substantial amounts of job time performing wideband systems performance monitoring and training tasks. Typical tasks performed by these incumbents include measuring pilots at baseband levels, making receive signal level (RSL) graphs, or measuring group pilot frequencies. Job satisfaction indicators are fairly good for both job types, with a majority of the personnel in both jobs planning to reenlist and finding their job interesting. (For more information about these job types see Table IV, V, and VI.)

FIGURE 4



Circuit Actions NCOs

There are seven fairly homogeneous job types identified in this cluster (see Figure 4), with the number of tasks performed and the amount of time spent on supervisory, administrative or technical tasks being the greatest differentiators among the job types. Circuit Monitoring Personnel are differentiated due to the amount of time performing circuit monitoring and analysis tasks, such as performing envelope delay distortion tests, performing idle channel noise tests, and performing phase jitter tests. In addition, even though 59 percent of these incumbents hold the 7-skill level, only 26 percent report supervising anyone. Circuit Actions and NCMO Personnel spend 29 percent of their job time performing administrative functions. Differentiating tasks for these incumbents include preparing NCMO briefings and conducting briefings other than Navigational Aids Communication Management Office (NCMO) briefings. Circuit Actions NCOICs seem to perform a higher level of supervision than other Circuit Actions NCOs job types. These respondents spend 53 percent of their job time performing supervisory tasks, and typically perform such tasks as initiating personnel action requests, counseling trainees on training progress, or implementing safety programs. It is interesting to note that these incumbents perform the highest average number of tasks (159) and are the most satisfied (59 percent planning to reenlist and 94 percent finding their job interesting) of all Circuit Actions NCOs job types. Only 20 percent of CONUS Telecommunication NCOICs are stationed overseas. These incumbents are differentiated due to the nature of the technical tasks they perform. These technical tasks involve data terminals and cross-connects, and include making in-service or out-of-service quality checks on data terminals, wiring cross-connects on distribution frames, and performing bit error rate tests on digital circuits. Forty percent of Wideband and Autovon Circuit Actions NCOs are working at a Wideband and Autovon TCF. These incumbents spend a large amount of job time performing technical tasks, such as removing or replacing signaling units, measuring group pilot levels and removing or replacing four-wire four-way bridges. These incumbents are relatively junior, averaging only 115 months TAFMS and only 40 percent work a day shift. Patch and Test Facility Circuit Actions NCOs spend 14 percent of their job time performing wideband performance monitoring tasks, such as measuring channel levels on baseband signals, measuring group pilot levels and measuring pilots at baseband levels. All of these respondents are stationed overseas, and a large percentage of these incumbents are dissatisfied with their job, with only 43 percent perceiving their job as interesting or planning to reenlist. Finally, Circuit Actions Shift Workers are primarily 5-skill level personnel and only 33 percent report supervising. These incumbents spend 44 percent of their job time performing circuit monitoring and maintaining telecommunications services, and typically perform tasks such as patching equipment, lines, or channels, performing cryptographic synchronizations, or making digital circuit loop-backs. It is interesting to note that only 22 percent of these respondents are stationed overseas, and only 44 percent plan to reenlist. (For more information about these job types see Tables IV, V, and VI.)

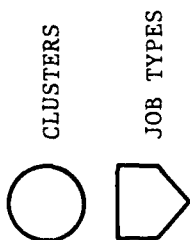
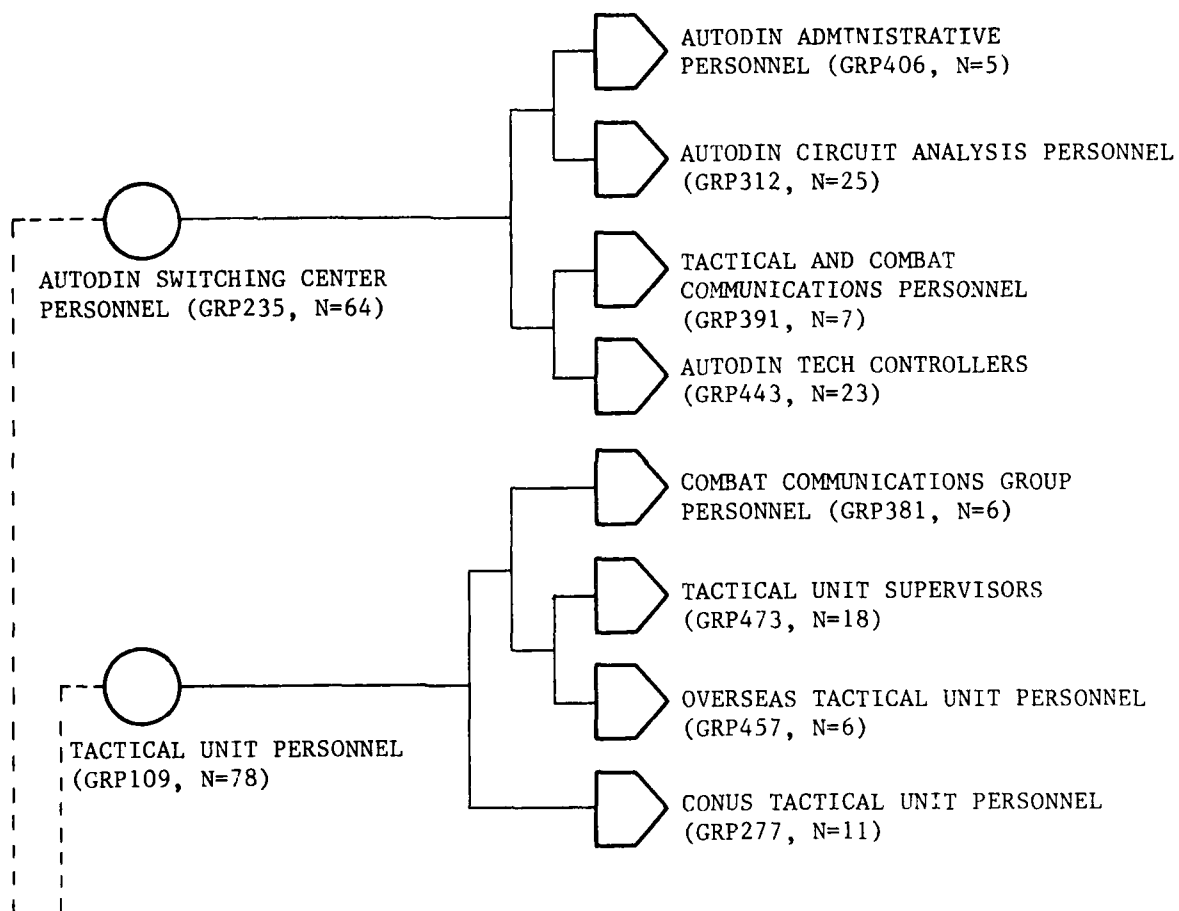
Tactical Unit Personnel

Figure 5 reveals there are four job types associated with this cluster. Differentiating factors for these job types include the average number of tasks performed, the time spent performing supervisory duties, and the unit of assignment. CONUS Tactical Unit Personnel perform the lowest average number of tasks and are the most junior of all Tactical Unit Personnel job types (averaging 54 months TAFMS). These incumbents spend a majority of their job time maintaining telecommunications service or erecting and maintaining tactical communications equipment, and typical tasks include preparing mobile vans for transport or storage, loading or unloading mobile communications equipment, or reconfiguring AN/TSC 62 vans. It is interesting to note that although these respondents are fairly interested with their job, only 18 percent plan to reenlist. Overseas Tactical Unit Personnel perform approximately twice as many tasks as personnel in the previous job type, and all hold the 5-skill level. These incumbents perform more of a directing role, and typical tasks include directing fault isolation or correction of circuit or system malfunctions, directing alternate routing of circuits, and analyzing causes of audio circuit failures. Job satisfaction indicators are fairly low for these incumbents, with only 33 percent perceiving their job utilizes their talents or training at least fairly well and only 17 percent plan to reenlist. Tactical Unit Supervisors spend 36 percent of their job time performing supervisory duties. These incumbents are the first-line supervisors of 307X0 personnel in tactical units, and perform such tasks as planning work assignments, supervising Telecommunications Systems Control Specialists (AFSC 30750), and participating in alerts or recalls. Combat Communications Group Personnel spend a majority of their job time performing technical telecommunications tasks, with tasks related to erecting and maintaining tactical equipment making up a large portion of these technical tasks. These incumbents seem to be more concerned with setting up or tearing down tactical communications equipment, and perform very few circuit monitoring tasks. Typical tasks performed by these respondents include packing or unpacking equipment, erecting or dismantling tents, or camouflaging mobile sites. It is interesting to note that these personnel have the lowest reenlistment intentions of all job groups identified in the 307X0 career ladder, with none of these respondents planning to reenlist. (For more information about these job types see Tables VII, VIII, and IX.)

AUTODIN Switching Center Personnel

There are two primary differentiating factors among the four job types in this cluster, and these include the number of tasks performed and the amount of time spent maintaining telecommunications service. AUTODIN Technical Controllers are the most junior (all holding the 3- or 5-skill level and averaging 45 months TAFMS) and perform the lowest average number of tasks (21). These incumbents spend 62 percent of their job time maintaining telecommunications services, and typical tasks include analyzing causes of digital circuit failures, performing fault isolation on AUTODIN switching center equipment, and performing fault isolation on circuits using black digital patch bays. Tactical and Combat Communications Personnel spend a substantial percentage of their job time performing continuity type tasks, such as checking continuity between local and distant controls, checking continuity of in-house wiring, and isolating circuit or system malfunctions.

FIGURE 5

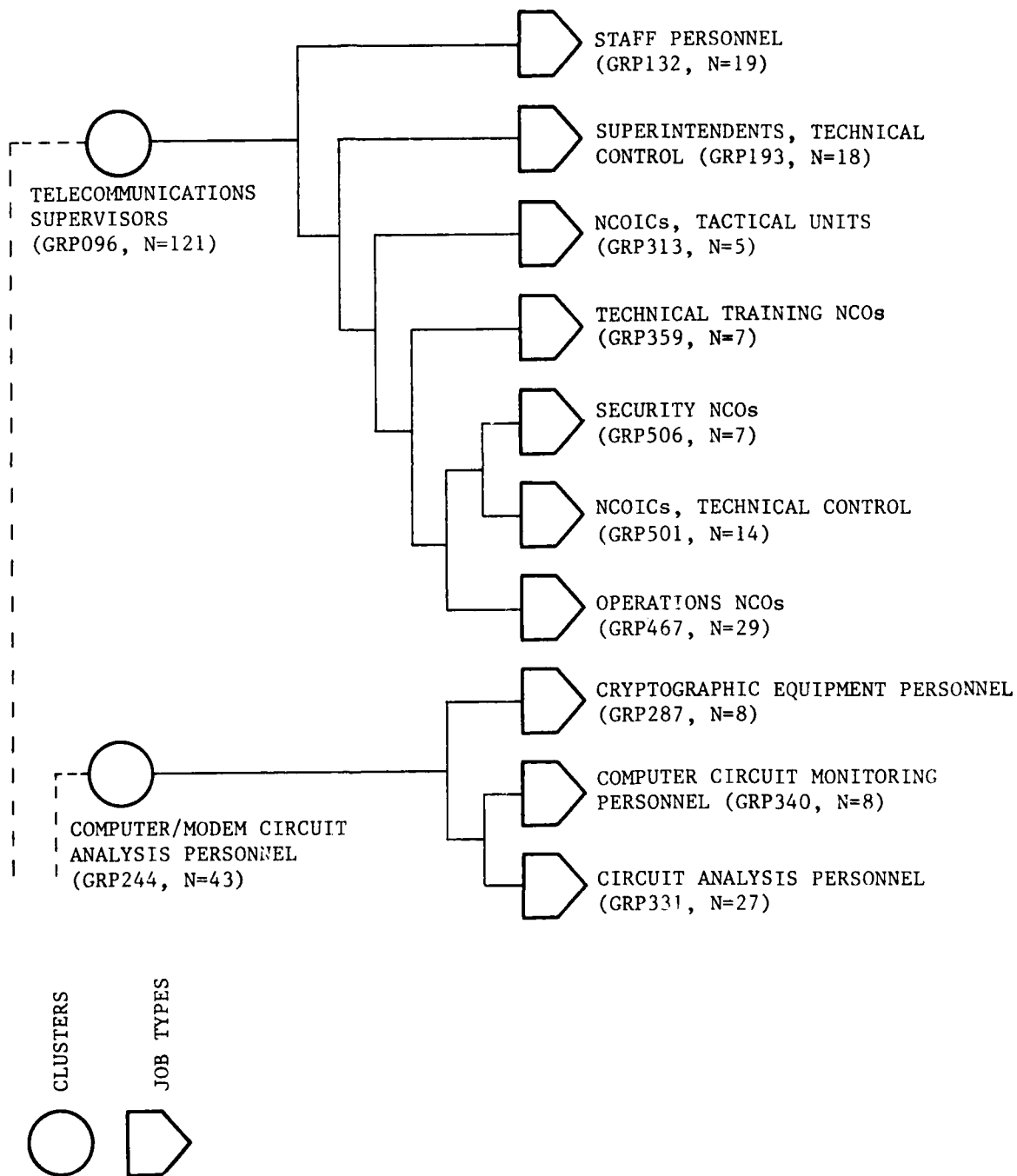


These incumbents are fairly satisfied with their job, with 86 percent finding their job interesting and 43 percent planning to reenlist. AUTODIN Circuit Analysis Personnel spend 58 percent of their job time performing circuit monitoring and maintaining telecommunications services, and many of the tasks commonly performed involve data buffers or modems. Typical tasks performed by these incumbents include making in-service or out-of-service quality checks on digital data modems or data buffers, performing cryptographic synchronizations, or coordinating circuit or equipment problems with other technical controls or communications facilities. AUTODIN Administrative Personnel spend 26 percent of their job time performing administrative functions, and typical tasks include maintaining trouble and restoration record forms (DD Form 1443), maintaining technical control communications work order forms (DD Form 1445), and maintaining automatic digital network (AUTODIN) tributary interruption reports. These incumbents are fairly dissatisfied with their job, with only 40 percent finding their job interesting or plan to reenlist. (For more information about these job types see Figure 5 and Tables VII, VIII and IX.)

Computer/Modem Circuit Analysis Personnel

The amount of time spent performing circuit monitoring, the average number of tasks performed, and the types of equipment or circuits monitored differentiate those three job types. Circuit Analysis Personnel perform a job fairly similar to job types in the DCS Technical Control Facility Personnel cluster discussed earlier in this section, but perform substantially less tasks. These incumbents spend 82 percent of their job time performing circuit monitoring or maintaining telecommunications service tasks, such as performing envelope delay distortion tests, performing impulse noise tests, or performing phase jitter tests. These respondents have fairly low reenlistment intentions, with only 12 percent planning to reenlist. Fifty percent of Computer Circuit Monitoring Personnel report operating computers, which is a higher percentage of personnel than the other job types in this cluster. All of these incumbents hold the 3- or 5-skill level, and typically perform such tasks as performing total peak telegraph distortion tests, performing bit error rate tests on digital circuits, or performing idle channel noise tests. A majority of these personnel do not find their job interesting, but 57 percent plan to reenlist. Cryptographic Equipment Personnel perform a relatively high number of tasks (58) and 25 percent report supervising. These incumbents perform many of the same tasks as the two previous job types, but in addition perform many security related tasks. Tasks performed by a majority of these individuals include performing or coordinating cryptographic synchronizations, storing classified information or materials, or using Automatic Secure Voice Communications (AUTOSEVOCOMM) equipment. These incumbents have fairly good job satisfaction indicators, with 100 percent finding their job interesting and 50 percent plan to reenlist. (For more information about these job types see Figure 6 and Tables X, XI, and XII.)

FIGURE 6



Telecommunications Supervisors

The seven job types identified in this cluster are Operations NCOs, NCOICs, Technical Control, Security NCOs, Technical Training NCOs, NCOICs, Tactical Units, Superintendents, Technical Control, and Staff Personnel (see Figure 6). All of these job types spend a majority of their job time performing supervisory and administrative tasks, and only one job type spends a substantial amount of time performing technical tasks. These job types are fairly homogeneous, and only slight differences in the number and nature of tasks performed differentiate these groups. NCOICs, Tactical Units are an interesting job type because these respondents spend approximately 40 percent of their job time performing technical tasks, such as reconfiguring AN/TSC 62 vans, loading or unloading mobile communications equipment, or applying power to facilities. These incumbents seem to be the supervisors of 307X0 personnel in tactical units, and all hold the 7-skill level. (For more information about these job types see Tables X, XI and XII).

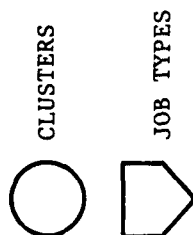
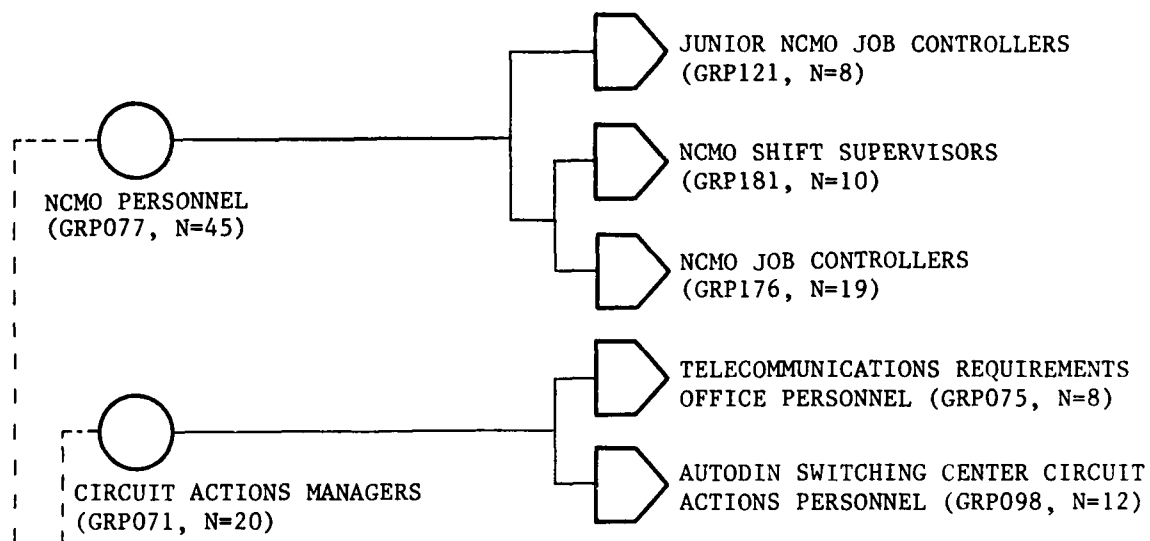
Circuit Actions Managers

AUTODIN Switching Center Circuit Actions Personnel and Telecommunications Requirements Office Personnel are the two job types found within this cluster (see Figure 7). AUTODIN Switching Center Circuit Actions Personnel perform higher average number of tasks (48), many of which involve various aspects of circuit monitoring. Differentiating tasks for these incumbents include establishing changes in circuits or channels or directing the labeling of patch bays. Thirty-eight percent of Telecommunications Requirements Office Personnel work in Telecommunications Requirements Offices. These incumbents spend 32 percent of their job time performing administrative tasks, many of which include receiving or distributing messages, implementing activation or changes of circuits, or maintaining circuit history folders. It is interesting to note that although 75 percent of these incumbents hold the 7- or 9-skill level, only 13 percent report supervising anyone. (For more information about these job types see Tables XIII, XIV, and XV.)

NCMO Personnel

The number of tasks performed and the amount of time spent performing supervisory or administrative tasks are the primary differentiators among the three job types within this cluster. NCMO Job Controllers spend 57 percent of their job time performing administrative tasks, such as maintaining job/status document forms (AF Form 264), coordinating requests for maintenance assistance, or dispatching maintenance specialists or equipment. Ninety-five percent of these incumbents hold the 5-skill level, and only 16 percent plan to reenlist. NCMO Shift Supervisors perform the highest average number of tasks (51) and spend a substantially larger amount of job time performing supervisory tasks. Typical tasks performed by a majority of these incumbents include supervising personnel with AFSCs other than AFSC 307X0, preparing NCMO briefings, and conducting OJT. These incumbents are very dissatisfied with their job, with only 20 percent finding their job interesting, 30 percent planning to reenlist, and no one perceiving their job utilizes their training at least fairly well. Junior NCMO Job Controllers perform essentially the same tasks as NCMO Job Controllers, but are less experienced and do not

FIGURE 7



perform as many tasks. These incumbents are also dissatisfied with their job, with only 25 percent perceiving their job as interesting. (For more information about these job types see Figure 7 and Tables XIII, XIV, and XV.)

TABLE 1

RELATIVE PERCENT TIME SPENT ON DUTIES BY JOB TYPES IN THE DCS TECHNICAL CONTROL
FACILITY PERSONNEL, SENIOR WIDEBAND AND AUTOVON SWITCHING PERSONNEL, AND WIDEBAND AND AUTOVON SWITCHING PERSONNEL CLUSTERS

DUTIES	DCS TECHNICAL CONTROL FACILITY PERSONNEL			SENIOR WIDEBAND & AUTOVON SWITCHING PERSONNEL		WIDEBAND AND AUTOVON SWITCHING PERSONNEL			
	JUNIOR TECH CONTROL (GRP492, N=8)	PRIMARY TECH CONTROL (GRP463, N=154)	ADMIN TECH CONTROL (GRP513, N=7)	WIDEBAND & AUTOVON SWITCHING WORKERS (GRP517, N=127)	WIDEBAND & AUTOVON SWITCHING SUPERVISORS (GRP450, N=7)	WIDEBAND		TECH	
						JUNIOR SHIFT WORKERS (GRP433, N=8)	CONTROL FACILITY SHIFT WORKERS (GRP388, N=7)	WIDEBAND & AUTOVON TCF SHIFT WORKERS (GRP428, N=6)	DCS TCF SHIFT WORKERS (GRP397, N=22)
ORGANIZING AND PLANNING	*	2	*	1	2	2	*	*	*
DIRECTING AND IMPLEMENTING	2	6	3	4	9	7	7	*	2
INSPECTING AND EVALUATING	*	2	2	1	4	*	1	*	*
TRAINING	*	3	5	3	10	1	3	*	*
PERFORMING ADMINISTRATIVE FUNCTIONS	5	9	12	7	11	19	17	4	4
PERFORMING CIRCUIT MONITORING AND ANALYSIS	31	33	34	38	27	31	19	35	41
PERFORMING WIDEBAND SYSTEMS PERFORMANCE									
MONITORING AND ANALYSIS	3	10	5	16	12	15	24	20	16
MAINTAINING TELECOMMUNICATIONS SERVICE	37	26	33	21	18	18	15	32	30
ERECTING AND MAINTAINING TACTICAL AND									
COMBAT COMMUNICATIONS EQUIPMENT AND FACILITIES	14	5	*	4	4	1	2	2	2
PERFORMING GENERAL TELECOMMUNICATIONS	6	4	5	4	3	6	10	4	4
FUNCTIONS									

* DENOTES LESS THAN ONE PERCENT

TABLE 11

BACKGROUND INFORMATION FOR JOB TYPES IN THE DCS TECHNICAL CONTROL FACILITY PERSONNEL,
SENIOR WIDEBAND AND AUTOVON SWITCHING PERSONNEL, AND WIDEBAND AND AUTOVON SWITCHING PERSONNEL CLUSTERS

	DCS TECHNICAL CONTROL FACILITY PERSONNEL				SENIOR WIDEBAND & AUTOVON SWITCHING PERSONNEL		WIDEBAND & AUTOVON SWITCHING PERSONNEL			
							WIDEBAND TECH			
	JUNIOR TECH CONTROL	PRIMARY TECH CONTROL	ADMIN TECH CONTROL		WIDEBAND & AUTOVON SWITCHING WORKERS	WIDEBAND & AUTOVON SWITCHING SUPERVISORS	JUNIOR SHIFT WORKERS	CONTROL FACILITY SHIFT WORKERS	WIDEBAND TCF SHIFT WORKERS	DCS TCF SHIFT WORKERS
AVERAGE NUMBER OF TASKS PERFORMED:	52	100	89		87	72	57	66	39	48
AVERAGE PAYGRADE	E-3, E-4	E-4	E-4		E-4	E-5	E-3	E-4	E-4	E-3, E-4
PERCENT SUPERVISING:	-	41%	43%		32%	100%	25%	-	17%	5%
DAFSC										
30710	38%	14%	14%		15%	14%	13%	-	17%	41%
30750	62%	73%	86%		69%	86%	87%	85%	83%	54%
30770	-	13%	-		16%	-	-	15%	-	5%
30790	-	-	-		-	-	-	-	-	-
CEM CODE 30700	-	-	-		-	-	-	-	-	-
AVERAGE MONTHS TAFMS:	44	71	61		68	114	34	64	41	38
PERCENT ASSIGNED OVERSEAS:	88%	74%	71%		100%	71%	87%	100%	100%	86%
UNIT PRESENTLY ASSIGNED:										
DCS TECHNICAL CONTROL FACILITY	63%	86%	100%		12%	57%	50%	43%	17%	73%
WIDEBAND AND AUTOVON TCF	-	5%	-		81%	28%	-	-	50%	-
WIDEBAND TECH CONT FACILITY	-	-	-		-	-	-	43%	-	5%
WORK SHIFT:										
DAY SHIFT	-	4%	-		-	14%	-	14%	-	5%
ROTATING SHIFTS	75%	86%	100%		93%	86%	62%	14%	100%	64%

TABLE III

JOB SATISFACTION DATA FOR JOB TYPES IN THE DCS TECHNICAL CONTROL FACILITY PERSONNEL,
SENIOR WIDEBAND AND AUTOVON SWITCHING PERSONNEL, AND WIDEBAND AND AUTOVON SWITCHING PERSONNEL
(PERCENT MEMBERS PERFORMING)

	DCS TECHNICAL CONTROL FACILITY PERSONNEL				SENIOR WIDEBAND & AUTOVON SWITCHING PERSONNEL		WIDEBAND & AUTOVON SWITCHING PERSONNEL			
	JUNIOR TECH CONTROL	PRIMARY TECH CONTROL	ADMIN TECH CONTROL		WIDEBAND & AUTOVON SWITCHING WORKERS	WIDEBAND & AUTOVON SWITCHING SUPERVISORS	JUNIOR SHIFT WORKERS	WIDEBAND TECH CONTROL FACILITY SHIFT WORKERS	WIDEBAND & AUTOVON TCF SHIFT WORKERS	DCS TCF SHIFT WORKERS
I FIND MY JOB:										
NO RESPONSE	-	-	-	-	2	-	-	-	-	-
DULL	12	8	-	-	7	-	25	43	-	14
SO-SO	12	14	-	-	16	57	25	14	-	9
INTERESTING	76	78	100		75	43	50	43	100	77
MY JOB UTILIZES MY TALENTS:										
NO RESPONSE	-	-	-	-	-	-	-	-	-	-
NOT AT ALL TO VERY LITTLE	12	18	-	-	15	29	25	43	33	9
FAIRLY WELL OR BETTER	88	82	100		85	71	75	57	67	91
MY JOB UTILIZES MY TRAINING:										
NO RESPONSE	-	1	-	-	2	-	-	-	-	-
NOT AT ALL TO VERY LITTLE	38	15	-	-	12	29	25	14	-	41
FAIRLY WELL OR BETTER	62	84	100		86	71	75	86	100	59
I PLAN TO REENLIST:										
NO RESPONSE	-	1	-	-	2	-	-	-	-	5
NO OR PROBABLY NO	50	59	57		50	57	88	43	50	68
YES OR PROBABLY YES	50	40	43		48	43	12	57	50	27

TABLE IV
RELATIVE PERCENT TIME SPENT ON DUTIES BY JOB TYPES IN THE INSTRUCTORS AND CIRCUIT ACTIONS NCOs CLUSTERS

DUTIES	INSTRUCTORS			CIRCUIT ACTIONS NCOs					
	CIRCUIT MONITORING INSTRUCTORS (GRP396, N=6)	WIDE BAND SYSTEMS INSTRUCTORS (GRP207, N=9)	CIRCUIT MONITORING & NCO PERSONNEL (GRP276, N=27)	CIRCUIT ACTIONS PERSONNEL (GRP305, N=7)	CIRCUIT ACTIONS NCOs (GRP680, N=17)	CONUS TELE- COMMUNICATION SERVICE NCOs (GRP608, N=5)	WIDE BAND & AUTOVON CIRCUIT ACTIONS NCOs (GRP511, N=10)	PATCH & TEST FACILITY CIRCUIT ACTIONS NCOs (GRP264, N=7)	CIRCUIT ACTIONS SHIFT WORKERS (GRP204, N=9)
ORGANIZING AND PLANNING	1	3	6	8	11	8	8	8	6
DIRECTING AND IMPLEMENTING	2	5	21	29	22	19	15	15	13
INSPECTING AND EVALUATING	1	3	4	7	9	6	5	4	4
TRAINING	16	15	3	4	11	8	7	15	5
PERFORMING ADMINISTRATIVE FUNCTIONS	*	3	18	29	16	11	10	12	13
PERFORMING CIRCUIT MONITORING AND ANALYSIS	61	34	21	4	12	16	22	13	21
PERFORMANCE MONITORING	*		5	5	2	2	9	14	2
AND ANALYSIS		27							
MAINTAINING TELECOMMUNICATIONS SERVICE	13	4	13	6	10	18	16	10	23
ERECTING AND MAINTAINING TACTICAL AND COMBAT COMMUN- ICATIONS EQUIPMENT AND FACILITIES	*	*	3	3	*	3	2	3	4
PERFORMING GENERAL TELECOM- MUNICATIONS FUNCTIONS	6	5	6	6	5	7	6	7	8

* DENOTES LESS THAN ONE PERCENT

TABLE V
BACKGROUND INFORMATION FOR JOB TYPES IN THE INSTRUCTORS AND CIRCUIT ACTIONS NCOS CLUSTERS

	INSTRUCTORS				CIRCUIT ACTIONS NCOS					PATCH & TEST FACILITY		
	CIRCUIT MONITORING INSTRUCTORS	WIDEBAND SYSTEMS INSTRUCTORS	CIRCUIT MONITORING PERSONNEL	CIRCUIT ACTIONS & NCOs PERSONNEL	CIRCUIT ACTIONS NCOS	CONUS TELECOMMUNICATION SERVICE NCOS	WIDEBAND & AUTOVON CIRCUIT ACTIONS NCOS	CIRCUIT ACTIONS NCOS	CIRCUIT ACTIONS NCOS	CIRCUIT ACTIONS NCOS	CIRCUIT ACTIONS NCOS	CIRCUIT ACTIONS NCOS
AVERAGE NUMBER OF TASKS PERFORMED	33	63	101	89	159	154	155	98	83			
AVERAGE PAYGRADE	E-5	E-5, E-6	E-5	E-5	E-6	E-6	E-6	E-5, E-6	E-5, E-6			
PERCENT SUPERVISING	-	11%	26%	43%	94%	80%	40%	72%	33%			
DAFSC:												
30730	-	-	-	-	-	-	-	-	-			
30750	50%	33%	41%	71%	12%	20%	50%	57%	56%			
30770	50%	56%	59%	29%	88%	80%	40%	43%	33%			
30790	-	11%	-	-	-	-	10%	-	11%			
DEM 1000-10700	-	-	-	-	-	-	-	-	-			
AVERAGE MONTHS TAFMS	117	136	104	132	168	138	115	124	137			
PERCENT ASSIGNED OVERSEAS	17%	11%	93%	100%	77%	20%	80%	100%	22%			
UNIT PRESENTLY ASSIGNED												
DCS TECH CONT FACILITY	-	-	48%	71%	35%	20%	30%	29%	22%			
WIDEBAND AND AUTOVON TLF	-	-	15%	14%	-	-	40%	-	-			
RESIDENT TECHNICAL SCHOOL	50%	78%	-	-	-	-	-	-	-			
WORK SHEET												
DAY SHEET	81%	89%	78%	100%	82%	80%	40%	43%	78%			
ROTATING SHEETS	-	-	4%	-	12%	-	30%	-	11%			
12 HOUR DAY SHEET	-	-	4%	-	-	-	30%	14%	11%			

TABLE VI
JOB SATISFACTION DATA FOR JOB TYPES IN THE INSTRUCTORS AND CIRCUIT ACTIONS NCOs CLUSTERS
(PERCENT MEMBERS PERFORMING)

	INSTRUCTORS			CIRCUIT ACTIONS NCOs				PATCH & TEST		
	CIRCUIT MONITORING INSTRUCTORS	WIDE BAND SYSTEMS INSTRUCTORS	CIRCUIT MONITORING PERSONNEL	CIRCUIT ACTIONS & NCO PERSONNEL		CIRCUIT CONUS TELE- COMMUNICATION SERVICE NCOs	WIDE BAND & AUTOVON CIRCUIT ACTIONS NCOs	FACILITY CIRCUIT ACTIONS NCOs	SHIFT WORKERS	CIRCUIT ACTIONS
				PERSONNEL	NCOs					
I FIND MY JOB:										
NO RESPONSE	-	-	-	-	-	-	-	-	-	-
DULL	-	22	-	-	6	-	-	43	-	-
SO-SO	17	-	15	14	-	20	10	14	22	22
INTERESTING	83	78	85	86	94	80	90	43	78	78
MY JOB UTILIZES MY TALENTS:										
NO RESPONSE	-	-	4	-	-	-	-	-	-	-
NOT AT ALL TO VERY LITTLE	17	11	7	14	6	-	20	43	33	33
FAIRLY WELL OR BETTER	83	89	89	86	94	100	80	57	67	67
MY JOB UTILIZES MY TRAINING:										
NO RESPONSE	-	-	-	-	-	-	-	-	-	-
NOT AT ALL TO VERY LITTLE	17	11	7	29	6	40	20	43	33	33
FAIRLY WELL OR BETTER	83	89	93	71	94	60	80	57	67	67
I PLAN TO REENLIST:										
NO RESPONSE	-	-	4	-	-	-	-	14	-	-
NO OR PROBABLY NO	33	44	33	57	41	60	50	43	56	56
YES OR PROBABLY YES	67	56	63	43	59	40	50	43	44	44

TABLE VII

RELATIVE PERCENT TIME SPENT ON DUTIES BY JOB TYPES IN THE TACTICAL UNIT PERSONNEL
AND AUTODIN SWITCHING CENTER PERSONNEL CLUSTERS

DUTIES	TACTICAL UNIT PERSONNEL				AUTODIN SWITCHING CENTER PERSONNEL			
	CONUS TACTICAL UNIT PERSONNEL (GRP277, N=11)	OVERSEAS TACTICAL UNIT PERSONNEL (GRP277, N=11)	TACTICAL UNIT SUPERVISORS (GRP473, N=18)	COMBAT COMMUNICATIONS GROUP PERSONNEL (GRP381, N=6)	AUTODIN TECHNICAL CONTROLLERS (GRP443, N=23)	TACTICAL AND COMBAT COMMUNICATIONS PERSONNEL (GRP391, N=7)	AUTODIN CIRCUIT ANALYSIS PERSONNEL (GRP312, N=25)	AUTODIN ADMINISTRATIVE PERSONNEL (GRP406, N=5)
ORGANIZING AND PLANNING	*	*	8	*	*	*	2	*
DIRECTING AND IMPLEMENTING	*	12	16	5	4	2	8	15
INSPECTING AND EVALUATING	*	2	5	*	*	*	2	1
TRAINING	*	*	7	*	*	*	3	4
PERFORMING ADMINISTRATIVE FUNCTIONS	6	14	10	9	7	3	17	26
PERFORMING CIRCUIT MONITORING AND ANALYSIS	15	16	13	16	18	20	23	17
PERFORMING WIDE BAND SYSTEMS PERFORMANCE								
MONITORING AND ANALYSIS	*	2	*	2	*	*	*	*
MAINTAINING TELECOMMUNICATIONS SERVICE	31	20	16	16	62	53	35	30
ERECTING AND MAINTAINING TACTICAL AND								
COMBAT COMMUNICATIONS EQUIPMENT AND	32	24	17	36	3	18	5	1
FACILITIES								
PERFORMING GENERAL TELECOMMUNICATIONS	13	8	7	14	5	3	6	4
FUNCTIONS								

* DENOTES LESS THAN ONE PERCENT

TABLE VIII

BACKGROUND INFORMATION FOR JOB TYPES IN THE TACTICAL UNIT PERSONNEL AND
AUTODIN SWITCHING CENTER PERSONNEL CLUSTERS

A20

	TACTICAL UNIT PERSONNEL				AUTODIN SWITCHING CENTER PERSONNEL			
	CONUS TACTICAL UNIT PERSONNEL	OVERSEAS TACTICAL UNIT PERSONNEL	TACTICAL UNIT SUPERVISORS	COMBAT COMMUNICATIONS GROUP PERSONNEL	AUTODIN TECHNICAL CONTROLLERS	TACTICAL AND COMBAT COMMUNICATIONS PERSONNEL	AUTODIN CIRCUIT ANALYSIS PERSONNEL	AUTODIN ADMINISTRATIVE PERSONNEL
AVERAGE NUMBER OF TASKS PERFORMED:	38	70	157	69	21	29	44	24
AVERAGE PAYGRADE:	E-4	E-4	E-5	E-4	E-3, E-4	E-4, E-5	E-4, E-5	E-4, E-5
PERCENT SUPERVISING:	9%	-	67%	33%	4%	14%	44%	40%
DAFSC:								
30730	36%	-	6%	17%	22%	29%	4%	20%
30750	55%	100%	50%	83%	78%	43%	80%	60%
30770	9%	-	44%	-	-	28%	16%	20%
30790	-	-	-	-	-	-	-	-
CEM CODE 30700	-	-	-	-	-	-	-	-
AVERAGE MONTHS TAFMS:								
PERCENT ASSIGNED OVERSEAS:	54	65	112	59	45	84	77	81
	36%	100%	33%	50%	13%	43%	60%	-
UNIT PRESENTLY ASSIGNED:								
AUTODIN SWITCHING CENTER	-	-	-	-	70%	39%	68%	80%
COMBAT COMMUNICATIONS GROUP	18%	-	39%	83%	-	14%	-	-
NON-DCS TECHNICAL CONTROL FACILITY	-	-	11%	17%	9%	29%	4%	-
TACTICAL UNIT	82%	100%	50%	-	-	-	-	-
WORK SHIFT:								
DAY SHIFT	36%	33%	61%	83%	26%	-	20%	-
ROTATING SHIFTS	-	17%	-	-	39%	57%	68%	20%
VARIABLE DEPENDING ON WORKLOAD	55%	50%	11%	33%	4%	-	4%	20%

TABLE IX

JOB SATISFACTION DATA FOR JOB TYPES IN THE TACTICAL UNIT PERSONNEL AND
AUTODIN SWITCHING CENTER PERSONNEL CLUSTERS
(PERCENT MEMBERS RESPONDING)

	TACTICAL UNIT PERSONNEL				AUTODIN SWITCHING CENTER PERSONNEL			
	CONUS TACTICAL UNIT PERSONNEL	OVERSEAS TACTICAL UNIT PERSONNEL	TACTICAL UNIT SUPERVISORS	COMBAT COMMUNICATIONS GROUP PERSONNEL	AUTODIN TECHNICAL CONTROLLERS	TACTICAL AND COMBAT COMMUNICATIONS PERSONNEL	AUTODIN CIRCUIT ANALYSIS PERSONNEL	AUTODIN ADMINISTRATIVE PERSONNEL
I FIND MY JOB:								
NO RESPONSE	-	-	-	-	-	-	-	-
DULL	18	33	28	-	-	14	12	40
SO-SO	9	17	28	33	22	-	28	20
INTERESTING	73	50	44	67	78	86	60	40
MY JOB UTILIZES MY TALENTS:								
NO RESPONSE	-	-	-	-	-	-	-	-
NOT AT ALL TO VERY LITTLE	18	67	22	17	17	29	20	40
FAIRLY WELL OR BETTER	82	33	78	83	83	71	80	60
MY JOB UTILIZES MY TRAINING:								
NO RESPONSE	-	-	-	-	-	-	-	-
NOT AT ALL TO VERY LITTLE	55	67	45	-	39	29	28	40
FAIRLY WELL OR BETTER	45	33	55	100	61	71	72	60
I PLAN TO REENLIST:								
NO RESPONSE	-	-	-	-	-	-	-	-
NO OR PROBABLY NO	82	83	50	100	74	57	60	60
YES OR PROBABLY YES	18	17	50	-	22	43	40	40

TABLE X
RELATIVE PERCENT TIME SPENT ON DUTIES BY JOB TYPES IN THE COMPUTER/MODEM CIRCUIT ANALYSIS PERSONNEL AND
TELECOMMUNICATIONS SUPERVISOR CLUSTERS

DUTIES	COMPUTER/MODEM CIRCUIT ANALYSIS PERSONNEL				TELECOMMUNICATIONS SUPERVISORS						
	CIRCUIT ANALYSIS PERSONNEL (GRP331, N=27)	COMPUTER CIRCUIT MONITORING PERSONNEL (GRP340, N=8)	CRYPTOGRAPHIC EQUIPMENT PERSONNEL (GRP287, N=8)	OPERATIONS NCOs (GRP467, N=29)	NCOs, TECHNICAL CONTROL (GRP501, N=14)	SECURITY NCOs (GRP506, N=7)	TECHNICAL TRAINING NCOs (GRP359, N=7)	TECHNICAL TACTICAL UNITS (GRP318, N=5)	SUPERIN- TENDENTS, TECHNICAL CONTROL (GRP193, N=18)	STAFF PERSONNEL (GRP132, N=19)	
ORGANIZING AND PLANNING	*	1	1	19	17	17	13	12	26	17	
DIRECTING AND IMPLEMENTING	2	9	11	29	29	37	18	21	35	29	
INSPECTING AND EVALUATING	*	*	1	17	18	19	9	7	17	14	
TRAINING	*	6	3	12	19	5	36	13	5	5	
PERFORMING ADMINISTRATIVE FUNCTIONS	5	4	10	11	10	14	9	9	13	19	
PERFORMING CIRCUIT MONITORING AND ANALYSIS	42	29	22	3	*	*	3	6	*	3	
PERFORMING WIDEBAND SYSTEMS PERFORMANCE MONITORING AND ANALYSIS	1	*	2	1	*	1	3	*	*	1	
MAINTAINING TELECOMMUNICATIONS SERVICE	40	40	31	2	1	*	3	10	*	2	
ERECTING AND MAINTAINING TACTICAL AND COMBAT COMMUNI- CATIONS EQUIPMENT AND FACILITIES	*	8	2	*	*	*	*	16	*	*	
PERFORMING GENERAL TELECOMMUNI- CATIONS FUNCTIONS	9	4	16	5	4	7	5	6	3	10	
* DENOTES LESS THAN ONE PERCENT											

* DENOTES LESS THAN ONE PERCENT

TABLE XI

BACKGROUND INFORMATION FOR JOB TYPES IN THE COMPUTER/MODEM CIRCUIT ANALYSIS PERSONNEL AND TELECOMMUNICATIONS SUPERVISORS CLUSTERS

	COMPUTER/MODEM CIRCUIT ANALYSIS			TELECOMMUNICATIONS SUPERVISORS									
	PERSONNEL			OPERATIONS NCOS			NCOs, TECHNICAL CONTROL		SECURITY NCOs		TECHNICAL TRAINING NCOs		SUPERIN- TENDENTS, TECHNICAL CONTROL
	CIRCUIT ANALYSIS PERSONNEL	COMPUTER CIRCUIT MONITORING PERSONNEL	CRYPTOGRAPHIC EQUIPMENT PERSONNEL				E-6, E-7	E-6, E-7	E-6, E-7	E-6, E-7	E-5, E-6	E-7	STAFF PERSONNEL
AVERAGE NUMBER OF TASKS PERFORMED:	33	39	36	110	72	73	E-6, E-7	E-6, E-7	E-6, E-7	E-6, E-7	93	40	48
AVERAGE PAYGRADE:	E-4	E-3, E-4	E-3	E-7	E-6, E-7	E-6, E-7							E-6, E-7
PERCENT SUPERVISING:	4%	11%	1%	93%	100%	86%					100%	89%	16%
DAFSC:													
30730	19%	25%	-	-	-	-	-	-	-	-	-	-	-
30750	67%	75%	75%	3%	-	-	-	-	-	-	-	-	-
30770	14%	-	25%	59%	100%	100%	-	-	-	-	-	-	11%
30790	-	-	-	38%	-	-	-	-	-	-	100%	72%	58%
CEM CODE 30700	-	-	-	-	-	-	-	-	-	-	-	22%	26%
AVERAGE MONTHS TAFMS:	67	38	86	229	204	210					154	240	210
PERCENT ASSIGNED OVERSEAS:	37%	12%	12%	72%	43%	100%					40%	61%	59%
UNIT PRESENTLY ASSIGNED:													
DCS TECHNICAL CONTROL FACILITY	26%	75%	25%	28%	43%	57%					-	50%	5%
NON-DCS TECHNICAL CONTROL FACILITY	22%	13%	50%	37%	-	-					-	6%	-
PATCH AND TEST FACILITY	22%	-	-	3%	-	-					-	6%	-
WORK SHIFT:													
DAY SHIFT	11%	12%	12%	76%	86%	86%					100%	94%	74%
SWING SHIFT	4%	-	25%	-	-	-					-	-	-
ROTATING SHIFTS	63%	88%	50%	-	-	-					-	-	5%

TABLE XII
 JOB SATISFACTION DATA FOR JOB TYPES IN THE COMPUTER/MODEM CIRCUIT ANALYSIS PERSONNEL
 AND TELECOMMUNICATIONS SUPERVISORS CLUSTERS
 (PERCENT MEMBERS RESPONDING)

	COMPUTER/MODEM CIRCUIT ANALYSIS			TELECOMMUNICATIONS SUPERVISORS								STAFF PERSONNEL
	COMPUTER PERSONNEL			OPERATIONS NCOs	NCOs, TECHNICAL CONTROL	SECURITY NCOs	TECHNICAL TRAINING NCOs	TECHNICAL NCOs, TACTICAL UNITS	SUPERIN- TENDENTS, TECHNICAL CONTROL			
	CIRCUIT ANALYSIS PERSONNEL	CIRCUIT MONITORING PERSONNEL	CRYPTOGRAPHIC EQUIPMENT PERSONNEL									
I FIND MY JOB:												
NO RESPONSE	-	-	-	3	-	14	-	-	-	-	-	
DULL	25	43	-	-	-	-	14	-	17	5		
SO-SO	25	14	-	7	14	14	-	40	6	26		
INTERESTING	50	43	100	90	86	72	86	60	77	69		
MY JOB UTILIZES MY TALENTS:												
NO RESPONSE	-	-	-	3	-	-	-	-	-	-		
NOT AT ALL TO VERY LITTLE	25	43	33	10	7	14	14	-	17	21		
FAIRLY WELL OR BETTER	75	57	67	87	93	86	86	100	83	79		
MY JOB UTILIZES MY TRAINING:												
NO RESPONSE	-	-	-	-	-	-	-	-	-	-		
NOT AT ALL TO VERY LITTLE	25	14	-	17	29	14	-	40	28	26		
FAIRLY WELL OR BETTER	75	86	100	83	71	86	100	60	72	74		
I PLAN TO REENLIST:												
NO RESPONSE	-	-	-	3	-	-	-	-	-	-		
NO OR PROBABLY NO	88	43	50	48	50	14	29	80	61	37		
YES OR PROBABLY YES	12	57	50	49	50	86	71	20	39	63		

TABLE XIII

RELATIVE PERCENT TIME SPENT ON DUTIES BY JOB TYPES IN THE CIRCUIT
ACTIONS MANAGERS AND NCMO PERSONNEL CLUSTERS

DUTIES	CIRCUIT ACTIONS MANAGERS			NCMO PERSONNEL		
	AUTODIN SWITCHING CENTER CIRCUIT ACTIONS PERSONNEL (GRP098, N=12)	TELECOMMUNICATIONS REQUIREMENTS OFFICE PERSONNEL (GRP075, N=8)	NCMO JOB CONTROLLERS (GRP176, N=19)	NCMO SHIFT SUPERVISORS (GRP181, N=10)	JUNIOR NCMO JOB CONTROLLERS (GRP121, N=8)	
ORGANIZING AND PLANNING	10	13	5	8	4	
DIRECTING AND IMPLEMENTING	29	37	9	20	14	
INSPECTING AND EVALUATING	6	5	2	5	*	
TRAINING	9	*	3	16	*	
PERFORMING ADMINISTRATIVE FUNCTIONS	28	32	57	34	52	
PERFORMING CIRCUIT MONITORING AND ANALYSIS	3	3	*	2	*	
PERFORMING WIDEAREA SYSTEMS PERFORMANCE MONITORING AND ANALYSIS	*	*	*	*	*	
MAINTAINING TELECOMMUNICATIONS SERVICE	6	5	*	*	3	
ERECTING AND MAINTAINING TACTICAL AND COMBAT COMMUNICATIONS EQUIPMENT AND FACILITIES	2	1	*	*	1	
PERFORMING GENERAL TELECOMMUNICATIONS FUNCTIONS	6	7	23	15	25	

* DENOTES LESS THAN ONE PERCENT

TABLE XIV
BACKGROUND INFORMATION OF JOB TYPES IN THE CIRCUIT ACTIONS MANAGERS
AND NCMO PERSONNEL CLUSTERS

	CIRCUIT ACTIONS MANAGERS			NCMO PERSONNEL		
	AUTODIN SWITCHING CENTER CIRCUIT ACTIONS PERSONNEL	TELECOMMUNICATIONS REQUIREMENTS OFFICE PERSONNEL	NCMO JOB CONTROLLERS	NCMO SHIFT SUPERVISORS	JUNIOR NCMO JOB CONTROLLERS	
AVERAGE NUMBER OF TASKS PERFORMED:	48	25	28	51	17	
AVERAGE PAYGRADE:	E-5	E-5, E-6	E-4	E-5	E-3, E-4	
PERCENT SUPERVISING:	50%	13%	15%	80%	25%	
DAFSC:						
30730	-	-	-	10%	12%	
30750	42%	25%	95%	70%	88%	
30770	58%	63%	5%	20%	-	
30790	-	12%	-	-	-	
CEM CODE 30700	-	-	-	-	-	
AVERAGE MONTHS TAFPS:	108	138	72	97	40	
PERCENT ASSIGNED OVERSEAS:	58%	75%	47%	80%	88%	
UNIT PRESENTLY ASSIGNED:						
AUTODIN SWITCHING CENTER	33%	-	-	-	-	
TELECOMMUNICATIONS REQUIREMENT OFFICE	8	38%	-	-	-	
COMBAT COMMUNICATIONS GROUP	-	-	5%	10%	38%	
NCMO	-	-	90%	80%	25%	
WORK SHIFT:						
DAY SHIFT	75%	100%	5%	10%	-	
ROTATING SHIFTS	-	-	47%	40%	63%	
12-HOUR DAY SHIFT	-	-	5%	20%	13%	

TABLE XV

JOB SATISFACTION DATA FOR JOB TYPES IN THE CIRCUIT ACTIONS
MANAGERS AND NCMO PERSONNEL CLUSTERS
(PERCENT MEMBERS RESPONDING)

	CIRCUIT ACTIONS MANAGERS			NCMO PERSONNEL		
	AUTODIN SWITCHING CENTER CIRCUIT ACTIONS PERSONNEL	TELECOMMUNICATIONS REQUIREMENTS OFFICE PERSONNEL		NCMO JOB CONTROLLERS	NCMO SHIFT SUPERVISORS	JUNIOR NCMO JOB CONTROLLERS
I FIND MY JOB:						
NO RESPONSE	-	-	-	-	-	-
DULL	-	12	-	42	60	50
SO-SO	8	-	-	21	20	25
INTERESTING	92	88	-	37	20	25
MY JOB UTILIZES MY TALENTS:						
NO RESPONSE	-	-	-	-	-	-
NOT AT ALL TO VERY LITTLE	8	17	-	69	90	75
FAIRLY WELL OR BETTER	92	88	-	31	10	25
MY JOB UTILIZES MY TRAINING:						
NO RESPONSE	-	13	-	-	-	-
NOT AT ALL TO VERY LITTLE	17	50	-	63	100	100
FAIRLY WELL OR BETTER	83	37	-	37	-	-
I PLAN TO REENLIST:						
NO RESPONSE	-	13	-	-	-	-
NO OR PROBABLY NO	42	25	-	84	70	12
YES OR PROBABLY YES	58	62	-	16	30	88

APPENDIX B

Appendix B lists representative tasks performed by the personnel in the clusters and independent job types identified in the CAREER LADDER STRUCTURE section. Listed below are the page numbers where the task list for each major job group can be found.

<u>MAJOR JOB GROUP</u>	<u>PAGE NUMBER</u>
I. DCS TECHNICAL CONTROL FACILITY PERSONNEL	B2
II. SENIOR WIDEBAND AND AUTOVON SWITCHING PERSONNEL	B3
III. WIDEBAND AND AUTOVON SWITCHING PERSONNEL	B4
IV. CIRCUIT QUALITY CONTROL PERSONNEL	B5
V. NCOICS, QUALITY CONTROL	B6
VI. MICROWAVE AND INDEPENDENT SIDEBAND PERSONNEL	B7
VII. SHIFT SUPERVISORS	B8
VIII. INSTRUCTORS	B9
IX. CIRCUIT ACTIONS NCOs	B10
X. TACTICAL UNIT PERSONNEL	B11
XI. SATELLITE TCF PERSONNEL	B12
XII. AUTODIN SWITCHING CENTER PERSONNEL	B13
XIII. AUTOMATIC SECURE VOICE NETWORK PERSONNEL	B14
XIV. COMPUTER/MODEM CIRCUIT ANALYSIS PERSONNEL	B15
XV. NETWORK CONTROLLERS	B16
XVI. AFGWC PATCH AND TEST PERSONNEL	B17
XVII. SATELLITE NETWORK CONTROLLERS	B18
XVIII. TELECOMMUNICATIONS SUPERVISORS	B19
XIX. FIRST-LINE SUPERVISORS	B20
XX. CIRCUIT ACTIONS MANAGERS	B21
XXI. STAFF ADMINISTRATIVE PERSONNEL	B22
XXII. STAFF QUALITY CONTROL PERSONNEL	B23
XXIII. QUALITY CONTROL NCOs	B24
XXIV. PERFORMANCE MONITOR PROGRAM MANAGERS	B25
XXV. TRAINING NCOICS	B26
XXVI. RESIDENT COURSE INSTRUCTORS	B27
XXVII. CIRCUIT ANALYSIS NCOs	B28
XXVIII. NCMO PERSONNEL	B29

TABLE I

REPRESENTATIVE TASKS PERFORMED BY DCS TECHNICAL CONTROL FACILITY PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=255)
PERFORM IDLE CHANNEL NOISE TESTS	99
MAKE DIGITAL CIRCUIT LOOP-BACKS	96
PATCH EQUIPMENT, LINES, OR CHANNELS	96
MAKE AUDIO CHANNEL LOOP-BACKS	96
PERFORM PHASE JITTER TESTS	96
PERFORM ENVELOPE DELAY DISTORTION TESTS	95
PERFORM MAXIMUM CHANGE IN AUDIO FREQUENCY TESTS	95
MAKE EQUIPMENT LOOP-BACKS	95
PERFORM IMPULSE NOISE TESTS	95
COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	94
MAKE QUALITY CHECKS ON STANDARD TEST TONE LEVELS	94
MAKE IN-SERVICE OR OUT-OF-SERVICE QUALITY CHECKS ON COMPOSITE SIGNAL TRANSMISSION LEVELS	94
ANALYZE CAUSES OF DIGITAL CIRCUIT FAILURES	93
PERFORM FAULT ISOLATION ON ANALOG CIRCUITS	93
PERFORM FAULT ISOLATION ON CIRCUITS USING BLACK DIGITAL PATCH BAYS	92
MAKE IN-SERVICE OR OUT-OF-SERVICE QUALITY CHECKS ON DIRECT CURRENT (DC) CIRCUITS	92
PERFORM AMPLITUDE VERSUS FREQUENCY TESTS (FREQUENCY RESPONSE TESTS)	92
PERFORM MAXIMUM NET LOSS VARIATION TESTS	90
CLEAN WORK AREAS	88
ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	87
MAKE QUALITY CHECKS ON TELETYPEWRITER PRINTERS	87
MAKE ON-CALL PATCHES	87

TABLE II

REPRESENTATIVE TASKS PERFORMED BY SENIOR WIDEBAND AND AUTOVON SWITCHING PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=150)
PERFORM IDLE CHANNEL NOISE TESTS	100
PERFORM IMPULSE NOISE TESTS	99
PERFORM PHASE JITTER TESTS	99
PERFORM AMPLITUDE VERSUS FREQUENCY TESTS (FREQUENCY RESPONSE TESTS)	99
PERFORM MAXIMUM CHANGE IN AUDIO FREQUENCY TESTS	98
PERFORM ENVELOPE DELAY DISTORTION TESTS	96
MAKE QUALITY CHECKS ON STANDARD TEST TONE LEVELS	95
MAKE LINK PERFORMANCE ASSESSMENT (LPA) OR PERFORMANCE MONITORING PROGRAM CHECKS	95
PERFORM HARMONIC DISTORTION TESTS	95
MAKE AUDIO CHANNEL LOOP-BACKS	93
PATCH EQUIPMENT, LINES, OR CHANNELS	93
PERFORM QUALITY ASSURANCE TEST OF AUTOMATIC VOICE NETWORK (AUTOVON) CIRCUITS	93
PERFORM MAXIMUM NET LOSS VARIATION TESTS	93
COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	91
PERFORM SINGLE TONE INTERFERENCE TESTS (CROSS TALK TESTS)	89
ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	89
CLEAN WORK AREAS	89
PERFORM SF OR DUPLEX SIGNALING TESTS ON PRIVATE BRANCH EXCHANGE (PBX) SUBSCRIBER LINES	88
MAKE ON-CALL PATCHES	88
MEASURE PILOTS AT BASEBAND LEVEL	84
MEASURE CHANNEL LEVELS ON BASEBAND SIGNALS	83
DETERMINE LINK STATUS	73

TABLE III
REPRESENTATIVE TASKS PERFORMED BY WIDEBAND AND AUTOVON
SWITCHING PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=55)
PERFORM IDLE CHANNEL NOISE TESTS	100
PERFORM BASEBAND SWEEPS	96
PERFORM IMPULSE NOISE TESTS	93
PERFORM ENVELOPE DELAY DISTORTION TESTS	87
MAKE QUALITY CHECKS ON STANDARD TEST TONE LEVELS	85
CLEAN WORK AREAS	85
MAKE AUDIO CHANNEL LOOP-BACKS	85
PERFORM PHASE JITTER TESTS	85
MAKE IN-SERVICE OR OUT-OF-SERVICE QUALITY CHECKS ON COMPOSITE SIGNAL TRANSMISSION LEVELS	84
PERFORM AMPLITUDE VERSUS FREQUENCY TESTS (FREQUENCY RESPONSE TESTS)	82
COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	80
MAKE LINK PERFORMANCE ASSESSMENT (LPA) OR PERFORMANCE MONITORING PROGRAM (PMP) CHECKS	80
MEASURE CHANNEL LEVELS ON BASEBAND SIGNALS	()
MEASURE PILOTS AT BASEBAND LEVEL	80
PATCH EQUIPMENT, LINES, OR CHANNELS	78
PERFORM BASEBAND LOADING (BBL) MEASUREMENTS	78
MEASURE GROUP PILOT LEVELS	78
PERFORM HARMONIC DISTORTION TESTS	76
DIRECT ALTERNATE ROUTING OF CIRCUITS	73
PERFORM MAXIMUM CHANGE IN AUDIO FREQUENCY TESTS	73
ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	67
PERFORM MAXIMUM NET LOSS VARIATION TESTS	67

TABLE IV
REPRESENTATIVE TASKS PERFORMED BY CIRCUIT QUALITY CONTROL PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=6)
COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	100
DIRECT FAULT ISOLATION OR CORRECTION OF CIRCUIT OR SYSTEM MALFUNCTIONS	100
MAKE AUDIO CHANNEL LOOP-BACKS	100
MAKE EQUIPMENT LOOP-BACKS	100
MAINTAIN TECHNICAL CONTROL COMMUNICATIONS WORK ORDER FORMS (DD FORM 1445)	100
DIRECT QUALITY CHECKS OF EQUIPMENT AFTER MAINTENANCE OR INSTALLATION	100
MAKE QUALITY CHECKS ON STANDARD TEST TONE LEVELS	100
PERFORM IDLE CHANNEL NOISE TESTS	100
PATCH EQUIPMENT, LINES, OR CHANNELS	83
PERFORM FAULT ISOLATION ON ANALOG CIRCUITS	83
MAINTAIN TROUBLE AND RESTORATION RECORD FORMS (DD FORM 1443)	83
ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	83
COORDINATE CIRCUIT RELEASES WITH SUBSCRIBERS	83
MAINTAIN IN-SERVICE OR OUT-OF-SERVICE QUALITY CONTROL (QC) REPORTS	83
DIRECT ALTERNATE ROUTING OF CIRCUITS	83
CLEAN WORK AREAS	83
MAINTAIN CIRCUIT DATA FORMS (DD FORM 1441)	83
DIRECT CIRCUIT OR SYSTEM CHECKS	67
ISOLATE CIRCUIT OR SYSTEM MALFUNCTIONS	67

TABLE V
REPRESENTATIVE TASKS PERFORMED BY NCOICs, QUALITY CONTROL

TASKS	PERCENT MEMBERS PERFORMING (N=6)
MAINTAIN CIRCUIT PARAMETER TEST DATA FORMS (DD FORM 1697)	100
ADJUST DELAY EQUALIZERS	100
ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	100
PERFORM IDLE CHANNEL NOISE TESTS	100
EVALUATE QUALITY CONTROL PROGRAMS	100
PERFORM ENVELOPE DELAY DISTORTION TESTS	100
PERFORM IMPULSE NOISE TESTS	100
PERFORM PHASE JITTER TESTS	100
PERFORM HARMONIC DISTORTION TESTS	100
PERFORM MAXIMUM CHANGE IN AUDIO FREQUENCY TESTS	100
ADJUST AMPLITUDE EQUALIZERS	100
PERFORM TERMINAL IMPEDANCE TESTS	100
PERFORM LONGITUDINAL BALANCE TESTS	100
PERFORM MAXIMUM NET LOSS VARIATION TESTS	100
PLAN QUALITY ASSURANCE PROGRAMS	83
DIRECT QUALITY CHECKS OF EQUIPMENT AFTER MAINTENANCE OR INSTALLATION	83
MAKE QUALITY CHECKS ON STANDARD TEST TONE LEVELS	83
SCHEDULE EQUIPMENT FOR PMEL SERVICING	83
DIRECT CIRCUIT OR SYSTEM CHECKS	83
PERFORM QUALITY ASSURANCE TEST OF AUTOMATIC VOICE NETWORK (AUTOVON) CIRCUITS	83
CLEAN WORK AREAS	83
ADJUST SIGNALING UNITS	83
CONTINUITY CHECK PATCH CORDS	83

TABLE VI

REPRESENTATIVE TASKS PERFORMED BY MICROWAVE AND INDEPENDENT SIDEBAND PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=6)
PATCH EQUIPMENT, LINES, OR CHANNELS	100
MAKE QUALITY CHECKS ON STANDARD TEST TONE LEVELS	100
MAKE DIGITAL CIRCUIT LOOP-BACKS	100
PERFORM FAULT ISOLATION ON CIRCUITS USING BLACK DIGITAL PATCH BAYS	100
PERFORM FAULT ISOLATION ON ANALOG CIRCUITS	100
CLEAN WORK AREAS	100
MAKE EQUIPMENT LOOP-BACKS	100
MAKE QUALITY CHECKS ON TELETYPEWRITER PRINTERS	100
PERFORM IDLE CHANNEL NOISE TESTS	100
MAKE IN-SERVICE OR OUT-OF-SERVICE QUALITY CHECKS ON VOICE FREQUENCY CARRIER TELEGRAPH (VFCT) TERMINALS	100
PERFORM OPERATOR MAINTENANCE ON TELETYPEWRITERS, SUCH AS CHANGING RIBBONS OR REPLACING PAPER	100
MAKE LINK PERFORMANCE ASSESSMENT (LPA) OR PERFORMANCE MONITORING PROGRAM (PMP) CHECKS	83
PERFORM TIME HACKS ON MASTER STATION CLOCKS	83
MAKE IN-SERVICE OR OUT-OF-SERVICE QUALITY CHECKS ON HIGH FREQUENCY (HF) OR INDEPENDENT SIDEBAND (ISB) SYSTEMS	83
MANUALLY SWITCH AUTOMATIC MICROWAVE ALLOCATIONS	83
MAKE IN-SERVICE OR OUT-OF-SERVICE QUALITY CHECKS ON TELETYPEWRITER KEYBOARDS	83
DETERMINE OPTIMUM OPERATING FREQUENCY FOR HIGH FREQUENCY (HF) COMMUNICATIONS	67
COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	67

TABLE VII
REPRESENTATIVE TASKS PERFORMED BY SHIFT SUPERVISORS

TASKS	PERCENT MEMBERS PERFORMING (N=23)
SUPERVISE TELECOMMUNICATIONS SYSTEMS CONTROL SPECIALISTS (AFSC 30750)	96
COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	96
CONDUCT OJT	96
PERFORM FAULT ISOLATION ON CIRCUITS USING BLACK DIGITAL PATCH BAYS	96
PATCH EQUIPMENT, LINES, OR CHANNELS	96
PREPARE APRs	96
MAKE EQUIPMENT LOOP-BACKS	96
SUPERVISE APPRENTICE TELECOMMUNICATIONS SYSTEMS CONTROL SPECIALISTS (AFSC 30730)	91
ANALYZE CAUSES OF DIGITAL CIRCUIT FAILURES	91
MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	91
DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	91
COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	91
MAKE DIGITAL CIRCUIT LOOP-BACKS	91
MAKE AUDIO CHANNEL LOOP-BACKS	87
PERFORM IDLE CHANNEL NOISE TESTS	87
MAKE IN-SERVICE OR OUT-OF-SERVICE QUALITY CHECKS ON COMPOSITE SIGNAL TRANSMISSION LEVELS	83
MAKE IN-SERVICE OR OUT-OF-SERVICE QUALITY CHECKS ON DIRECT CURRENT (DC) CIRCUITS	83
DIRECT CIRCUIT OR SYSTEM CHECKS	78
PERFORM FAULT ISOLATION ON CIRCUITS USING RED DIGITAL PATCH BAYS	78

TABLE VIII
REPRESENTATIVE TASKS PERFORMED BY INSTRUCTORS

TASKS	PERCENT MEMBERS PERFORMING (N=24)
PERFORM IDLE CHANNEL NOISE TESTS	100
PERFORM IMPULSE NOISE TESTS	100
PERFORM MAXIMUM NET LOSS VARIATION TESTS	96
PERFORM MAXIMUM CHANGE IN AUDIO FREQUENCY TESTS	96
PERFORM HARMONIC DISTORTION TESTS	92
PERFORM PHASE JITTER TESTS	92
PERFORM AMPLITUDE VERSUS FREQUENCY TESTS (FREQUENCY RESPONSE TESTS)	92
PERFORM ENVELOPE DELAY DISTORTION TESTS	88
PERFORM TERMINAL IMPEDANCE TESTS	88
MAKE QUALITY CHECKS ON STANDARD TEST TONE LEVELS	83
PERFORM SINGLE TONE INTERFERENCE TESTS (CROSS TALK TESTS)	83
PERFORM LONGITUDINAL BALANCE TESTS	79
MAKE IN-SERVICE OR OUT-OF-SERVICE QUALITY CHECKS ON COMPOSITE SIGNAL TRANSMISSION LEVELS	75
ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	71
ADJUST AMPLITUDE EQUALIZERS	67
ADJUST LINE AMPLIFIERS	58
ANALYZE CAUSES OF DIGITAL CIRCUIT FAILURES	50
PERFORM BASEBAND SWEEPS	50
PERFORM BASEBAND LOADING (BBL) MEASUREMENTS	50
PATCH EQUIPMENT, LINES, OR CHANNELS	46
CONDUCT RESIDENT COURSE CLASSROOM TRAINING	42
DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	42
SCORE TESTS	42
WRITE TEST QUESTIONS	39

TABLE IX

REPRESENTATIVE TASKS PERFORMED BY CIRCUIT ACTIONS NCOs

TASKS	PERCENT MEMBERS PERFORMING (N=98)
DIRECT LABELING OF PATCH BAYS	86
LABEL PATCH BAYS OR EQUIPMENT	84
CONDUCT ACCEPTANCE TESTING OF NEW SYSTEMS, CIRCUITS, OR EQUIPMENT	84
PERFORM IDLE CHANNEL NOISE TESTS	84
MAINTAIN CIRCUIT DATA FORMS (DD FORM 1441)	83
COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	83
PATCH EQUIPMENT, LINES, OR CHANNELS	82
TYPE FORMS, REPORTS, OR CORRESPONDENCE	82
MAINTAIN CIRCUIT HISTORY FOLDERS	79
ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	79
PERFORM IMPULSE NOISE TESTS	79
DIRECT WIRING OF CROSS CONNECTIONS OR DISTRIBUTION FRAMES	79
IMPLEMENT ACTIVATION OR CHANGES OF CIRCUITS	78
CLEAN WORK AREAS	78
PERFORM PHASE JITTER TESTS	78
PERFORM ENVELOPE DELAY DISTORTION TESTS	77
MAKE EQUIPMENT LOOP-BACKS	76
COORDINATE CIRCUIT RELEASES WITH SUBSCRIBERS	74
DEVELOP WORK METHODS OR PROCEDURES	74
PERFORM FAULT ISOLATION ON ANALOG CIRCUITS	73
STORE CLASSIFIED INFORMATION OR MATERIALS	72
IMPLEMENT CHANGES TO TELECOMMUNICATIONS SYSTEMS	72
DIRECT CIRCUIT OR SYSTEM CHECKS	72
ESTABLISH CHANGES IN CIRCUITS OR CHANNELS	71

TABLE X
REPRESENTATIVE TASKS PERFORMED BY TACTICAL UNIT PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=78)
CLEAN WORK AREAS	96
CHECK CONTINUITY BETWEEN LOCAL TECHNICAL CONTROL FACILITIES AND USERS	95
PACK OR UNPACK EQUIPMENT	94
CHECK CONTINUITY BETWEEN LOCAL AND DISTANT TECHNICAL CONTROLS	92
MAKE AUDIO CHANNEL LOOP-BACKS	92
LAY CABLES	91
OPERATE MILITARY VEHICLES	91
PATCH EQUIPMENT, LINES, OR CHANNELS	90
LOAD OR UNLOAD MOBILE COMMUNICATIONS EQUIPMENT	90
PERFORM IDLE CHANNEL NOISE TESTS	90
PREPARE MOBILE VANS FOR TRANSPORTATION OR STORAGE	90
MAKE QUALITY CHECKS ON STANDARD TEST TONE LEVELS	90
ADJUST LINE AMPLIFIERS	90
ISOLATE CIRCUIT OR SYSTEM MALFUNCTIONS	87
CHECK CONTINUITY OF CABLES OR IN-HOUSE WIRING	87
COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	86
CHANGE FREQUENCIES ON RADIO SYSTEMS	82
LABEL PATCH BAYS OR EQUIPMENT	82
ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	81
WIRE CROSS-CONNECTS OR DISTRIBUTION FRAMES	79
ERECT OR DISMANTLE TENTS	79
DIRECT FREQUENCY CHANGES OR CHECKS	79
CAMOUFLAGE MOBILE SITES	74
RECONFIGURE AN/TSC 62 VANS	74

TABLE XI
REPRESENTATIVE TASKS PERFORMED BY SATELLITE TCF PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=11)
PERFORM IDLE CHANNEL NOISE TESTS	100
PERFORM BASEBAND SWEEPS	100
PERFORM BASEBAND LOADING (BBL) MEASUREMENTS	100
MEASURE GROUP PILOT LEVELS	91
MAKE IN-SERVICE OR OUT-OF-SERVICE QUALITY CHECKS ON COMPOSITE SIGNAL TRANSMISSION LEVELS	91
TYPE FORMS, REPORTS, OR CORRESPONDENCE	82
MAINTAIN MASTER STATION LOG FORMS (DD FORM 1753)	82
PERFORM SELECTIVE VOLTMETER NOISE (SVN) SLOT MEASUREMENTS	82
MEASURE CHANNEL LEVELS ON BASEBAND SIGNALS	82
CLEAN WORK AREAS	82
PERFORM IMPULSE NOISE TESTS	82
MAINTAIN WIDEBAND OUTAGE RECORD FORMS (DD FORM 1698)	64
MAINTAIN DCS STATUS REPORTS ON CIRCUITS OR CHANNELS	64
COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	64
PATCH EQUIPMENT, LINES, OR CHANNELS	64
MEASURE GROUP PILOT FREQUENCIES	64
MAKE QUALITY CHECKS ON STANDARD TEST TONE LEVELS	64
MAKE LINK PERFORMANCE ASSESSMENT (LPA) OR PERFORMANCE MONITORING PROGRAM (PMP) CHECKS	55
PERFORM FAULT ISOLATION ON ANALOG CIRCUITS	55
MEASURE PILOTS AT BASEBAND LEVEL	55
MOW LAWNS OR MAINTAIN GROUNDS	55
MAKE AUDIO CHANNEL LOOP-BACKS	55

TABLE XII
REPRESENTATIVE TASKS PERFORMED BY AUTODIN SWITCHING CENTER PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=64)
PERFORM FAULT ISOLATION ON CIRCUITS USING BLACK DIGITAL PATCH BAYS	100
MAKE DIGITAL CIRCUIT LOOP-BACKS	100
PERFORM FAULT ISOLATION ON CIRCUITS USING RED DIGITAL PATCH BAYS	98
COORDINATE CRYPTOGRAPHIC SYNCHRONIZATIONS	92
ANALYZE CAUSES OF DIGITAL CIRCUIT FAILURES	89
COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	86
PATCH EQUIPMENT, LINES, OR CHANNELS	86
MAKE EQUIPMENT LOOP-BACKS	83
MAKE IN-SERVICE OR OUT-OF-SERVICE QUALITY CHECKS ON CRYPTOGRAPHIC EQUIPMENT	69
PERFORM FAULT ISOLATION ON AUTODIN SWITCHING CENTER EQUIPMENT	56
MAKE IN-SERVICE OR OUT-OF-SERVICE QUALITY CHECKS ON DIRECT CURRENT (DC) CIRCUITS	56
PERFORM CRYPTOGRAPHIC SYNCHRONIZATIONS	55
CLEAN WORK AREAS	53
PERFORM OPERATOR MAINTENANCE ON TELETYPEWRITERS, SUCH AS CHANGING RIBBONS OR REPLACING PAPER	48
MAKE AUDIO CHANNEL LOOP-BACKS	45
COORDINATE CIRCUIT RELEASES WITH SUBSCRIBERS	45
MAINTAIN MASTER STATION LOG FORMS (DD FORM 1753)	45
MAINTAIN TECHNICAL CONTROL COMMUNICATIONS WORK ORDER FORMS (DD FORM 1445)	45
MAINTAIN TROUBLE AND RESTORATION RECORD FORMS (DD FORM 1443)	44
MAKE QUALITY CHECKS ON TELETYPEWRITER PRINTERS	44

TABLE XIII

REPRESENTATIVE TASKS PERFORMED BY AUTOMATIC SECURE VOICE NETWORK PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=13)
MAKE EQUIPMENT LOOP-BACKS	100
MAKE DIGITAL CIRCUIT LOOP-BACKS	100
COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	92
CLEAN WORK AREAS	92
PATCH EQUIPMENT, LINES, OR CHANNELS	92
PERFORM FAULT ISOLATION ON CIRCUITS USING RED DIGITAL PATCH BAYS	92
PERFORM FAULT ISOLATION ON CIRCUITS USING BLACK DIGITAL PATCH BAYS	85
PERFORM OPERATOR MAINTENANCE ON TELETYPEWRITERS, SUCH AS CHANGING RIBBONS OR REPLACING PAPER	85
ANALYZE CAUSES OF DIGITAL CIRCUIT FAILURES	77
MAINTAIN MASTER STATION LOG FORMS (DD FORM 1753)	77
MAINTAIN TECHNICAL CONTROL COMMUNICATIONS WORK ORDER FORMS (DD FORM 1445)	69
MAKE AUDIO CHANNEL LOOP-BACKS	69
COORDINATE CIRCUIT RELEASES WITH SUBSCRIBERS	69
MAKE ON-CALL PATCHES	69
MAINTAIN TROUBLE AND RESTORATION RECORD FORMS (DD FORM 1443)	62
MAINTAIN DCS STATUS REPORTS ON CIRCUITS OR CHANNELS	62
PERFORM FAULT ISOLATION ON ANALOG CIRCUITS	62
CONTINUITY CHECK PATCH CORDS	54
ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	54
TYPE FORMS, REPORTS, OR CORRESPONDENCE	54
PATICIPATE IN ALERTS OR RECALLS	54
PERFORM IMPULSE NOISE TESTS	46

TABLE XIV

REPRESENTATIVE TASKS PERFORMED BY COMPUTER/MODEM CIRCUIT ANALYSIS PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=43)
PERFORM FAULT ISOLATION ON CIRCUITS USING BLACK DIGITAL PATCH BAYS	93
PERFORM IDLE CHANNEL NOISE TESTS	93
PERFORM FAULT ISOLATION ON CIRCUITS USING RED DIGITAL PATCH BAYS	91
MAKE DIGITAL CIRCUIT LOOP-BACKS	91
MAKE AUDIO CHANNEL LOOP-BACKS	91
PERFORM PHASE JITTER TESTS	86
ANALYZE CAUSES OF DIGITAL CIRCUIT FAILURES	84
MAKE EQUIPMENT LOOP-BACKS	84
PERFORM IMPULSE NOISE TESTS	84
COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	79
PATCH EQUIPMENT, LINES, OR CHANNELS	77
MAKE IN-SERVICE OR OUT-OF-SERVICE QUALITY CHECKS ON COMPOSITE SIGNAL TRANSMISSION LEVELS	74
PERFORM ENVELOPE DELAY DISTORTION TESTS	74
COORDINATE CRYPTOGRAPHIC SYNCHRONIZATIONS	72
PERFORM FAULT ISOLATION ON ANALOG CIRCUITS	72
PERFORM MAXIMUM CHANGE IN AUDIO FREQUENCY TESTS	72
CLEAN WORK AREAS	67
MAKE QUALITY CHECKS ON STANDARD TEST TONE LEVELS	67
PERFORM BIT ERROR RATE TESTS ON DIGITAL CIRCUITS	67
ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	60
MAKE IN-SERVICE OR OUT-OF-SERVICE QUALITY CHECKS ON DIRECT CURRENT (DC) CIRCUITS	58
DIRECT ALTERNATE ROUTING OF CIRCUITS	58

TABLE XV
REPRESENTATIVE TASKS PERFORMED BY NETWORK CONTROLLERS

TASKS	PERCENT MEMBERS PERFORMING (N=6)
ANALYZE CAUSES OF DIGITAL CIRCUIT FAILURES	100
PERFORM BIT ERROR RATE TESTS ON DIGITAL CIRCUITS	100
MAKE DIGITAL CIRCUIT LOOP-BACKS	100
MAKE IN-SERVICE OR OUT-OF-SERVICE QUALITY CHECKS ON DIGITAL DATA MODEMS	83
MAKE EQUIPMENT LOOP-BACKS	83
PERFORM BIT ERROR RATE TESTS ON TIME DIVISION MULTIPLEXING (TDM) EQUIPMENT	83
CHECK CONTINUITY OF CABLES OR IN-HOUSE WIRING	83
COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	83
CLEAN WORK AREAS	83
LABEL PATCH BAYS OR EQUIPMENT	83
ISOLATE CIRCUIT OR SYSTEM MALFUNCTIONS	67
PERFORM FAULT ISOLATION ON TIME DIVISION MULTIPLEX (TDM) SYSTEMS	67
ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	67
SECURE FACILITIES	67
MAKE IN-SERVICE OR OUT-OF-SERVICE QUALITY CHECKS ON DATA TERMINALS	67
CONDUCT ACCEPTANCE TESTING OF NEW SYSTEMS, CIRCUITS, OR EQUIPMENT	67
PACK OR UNPACK EQUIPMENT	67
WIRE CROSS CONNECTS ON DISTRIBUTION FRAMES	50
DISPATCH MAINTENANCE SPECIALISTS OR EQUIPMENT	50
CHECK CONTINUITY BETWEEN LOCAL TECHNICAL CONTROLS AND USERS	33
COORDINATE REQUESTS FOR MAINTENANCE ASSISTANCE	33
IMPLEMENT ACTIVATION OR CHANGES OF CIRCUITS	33
MAKE ON-CALL PATCHES	33
COORDINATE CONFERENCE CALLS WITH CUSTOMERS	33

TABLE XVI
REPRESENTATIVE TASKS PERFORMED BY AFGWC PATCH AND TEST PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=5)
CLEAN WORK AREAS	100
PATCH EQUIPMENT, LINES, OR CHANNELS	100
PERFORM IMPULSE NOISE TESTS	100
PERFORM AMPLITUDE VERSUS FREQUENCY TESTS (FREQUENCY RESPONSE TESTS)	100
PERFORM ENVELOPE DELAY DISTORTION TESTS	100
PERFORM IDLE CHANNEL NOISE TESTS	100
MAKE QUALITY CHECKS ON STANDARD TEST TONE LEVELS	80
MAKE IN-SERVICE OR OUT-OF-SERVICE QUALITY CHECKS ON COMPOSITE SIGNAL TRANSMISSION LEVELS	80
COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	80
PERFORM MAXIMUM CHANGE IN AUDIO FREQUENCY TESTS	80
PERFORM MAXIMUM NET LOSS VARIATION TESTS	80
PERFORM PHASE JITTER TESTS	80
PERFORM FAULT ISOLATION ON FACSIMILE TRANSMISSIONS	60
MAINTAIN TECHNICAL CONTROL COMMUNICATIONS WORK ORDER FORMS (DD FORM 1445)	60
ISOLATE CIRCUIT OR SYSTEM MALFUNCTIONS	60
MAKE AUDIO CHANNEL LOOP-BACKS	60
CONTINUITY CHECK PATCH CORDS	60
MAINTAIN TROUBLE AND RESTORATION RECORD FORMS (DD FORM 1443)	60
MAKE IN-SERVICE OR OUT-OF-SERVICE QUALITY CHECKS ON DIGITAL DATA MODEMS	60
ANALYZE CAUSES OF DIGITAL CIRCUIT FAILURES	40
MAKE EQUIPMENT LOOP-BACKS	40

TABLE XVII
REPRESENTATIVE TASKS PERFORMED BY SATELLITE NETWORK CONTROLLERS

TASKS	PERCENT MEMBERS PERFORMING (N=8)
SERVE AS A SPONSOR FOR NEWLY ASSIGNED PERSONNEL	100
CLEAN WORK AREAS	100
MAINTAIN MASTER STATION LOG FORMS (DD FORM 1753)	88
DIRECT FAULT ISOLATION OR CORRECTION OF CIRCUIT OR SYSTEM MALFUNCTIONS	88
PERFORM CRYPTOGRAPHIC SYNCHRONIZATIONS	88
PERFORM FAULT ISOLATION ON CIRCUITS USING BLACK DIGITAL PATCH BAYS	88
PERFORM FAULT ISOLATION ON CIRCUITS USING RED DIGITAL PATCH BAYS	88
DIRECT ALTERNATE ROUTING OF CIRCUITS	75
DIRECT CIRCUIT OR SYSTEM CHECKS	75
COORDINATE SPECIAL COMMUNICATIONS REQUIREMENTS WITH USERS OR DCA	75
USE AUTOMATIC SECURE VOICE COMMUNICATIONS (AUTOSEVOCOMM)	75
PERFORM OPERATOR MAINTENANCE ON TELETYPEWRITERS, SUCH AS CHANGING RIBBONS OR REPLACING PAPER	75
COORDINATE CRYPTOGRAPHIC SYNCHRONIZATIONS	75
ANALYZE CAUSES OF DIGITAL CIRCUIT FAILURES	75
COORDINATE CIRCUIT RELEASES WITH SUBSCRIBERS	75
PERFORM OPERATIONAL CHECKS OF SATELLITE COMMUNICATIONS SYSTEMS	63
IMPLEMENT TELECOMMUNICATIONS CONTINGENCY PLANS	63
MAINTAIN COMMUNICATIONS NETWORK LOGS	63
COORDINATE OPERATIONAL CHANGES TO CIRCUITS OR CHANNELS WITH USERS OR DEFENSE COMMUNICATIONS AGENCY (DCA)	63
VISIT COMMUNICATIONS FACILITIES FOR FAMILIARIZATION	63
MAKE AUDIO CHANNEL LOOP-BACKS	63
ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	63
MONITOR SYSTEM DISPLAY STATUS BOARDS	50

TABLE XVIII
REPRESENTATIVE TASKS PERFORMED BY TELECOMMUNICATIONS SUPERVISORS

TASKS	PERCENT MEMBERS PERFORMING (N=121)
WRITE CORRESPONDENCE	91
INDOCTRINATE NEWLY ASSIGNED PERSONNEL	88
DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES	86
COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	83
PREPARE APRs	81
PARTICIPATE IN STAFF MEETINGS	79
INTERPRET POLICIES, PROCEDURES, OR DIRECTIVES FOR SUBORDINATES	78
ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS (OIs) OR STANDARD OPERATING PROCEDURES (SOPs)	78
DETERMINE WORK PRIORITIES	77
SCHEDULE LEAVES OR PASSES	75
INDORSE AIRMAN PERFORMANCE REPORTS (APRs)	75
ASSIGN PERSONNEL TO DUTY POSITIONS	74
ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL	74
DIRECT MAINTENANCE OR ADMINISTRATIVE FILES	71
PARTICIPATE IN ALERTS OR RECALLS	71
DEVELOP WORK METHODS OR PROCEDURES	70
PLAN BRIEFINGS	70
TYPE FORMS, REPORTS, OR CORRESPONDENCE	69
PREPARE RECOMMENDATIONS FOR AWARDS OR DECORATIONS	66
ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	65
SUPERVISE TELECOMMUNICATIONS SYSTEMS CONTROL TECHNICIANS (AFSC 30770)	65
EVALUATE WORK SCHEDULES	64
DRAFT REPORTS	62

TABLE XIX
REPRESENTATIVE TASKS PERFORMED BY FIRST-LINE SUPERVISORS

TASKS	PERCENT MEMBERS PERFORMING (N=12)
SUPERVISE TELECOMMUNICATIONS SYSTEMS CONTROL SPECIALISTS (AFSC 30750)	92
PREPARE APRs	92
DETERMINE WORK PRIORITIES	92
COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	92
INDOCTRINATE NEWLY ASSIGNED PERSONNEL	92
CONDUCT OJT	83
DIRECT CIRCUIT OR SYSTEM CHECKS	83
DIRECT FAULT ISOLATION OR CORRECTION OF CIRCUIT OR SYSTEM MALFUNCTIONS	83
COUNSEL TRAINEES ON TRAINING PROGRESS	83
ASSIGN ON-THE-JOB TRAINING (OJT) TRAINERS	83
ASSIGN PERSONNEL TO DUTY POSITIONS	75
MAINTAIN MASTER STATION LOG FORMS (DD FORM 1753)	67
MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	67
RATE PROGRESS OF INDIVIDUALS IN TRAINING	67
ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	67
DEVELOP WORK METHODS OR PROCEDURES	67
INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	58
CONDUCT FACILITY RATING TRAINING	50
MAINTAIN TROUBLE AND RESTORATION RECORD FORMS (DD FORM 1443)	50
EVALUATE OJT TRAINEES	50
DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	50
SUPERVISE APPRENTICE TELECOMMUNICATIONS SYSTEMS CONTROL SPECIALISTS (AFSC 30730)	42

TABLE XX
REPRESENTATIVE TASKS PERFORMED BY CIRCUIT ACTIONS MANAGERS

TASKS	PERCENT MEMBERS PERFORMING (N=20)
MAINTAIN CIRCUIT HISTORY FOLDERS	95
PREPARE IN-EFFECT REPORTS	80
PREPARE DELAYED SERVICE REPORTS	80
IMPLEMENT ACTIVATION OR CHANGES OF CIRCUITS	75
PREPARE EXCEPTION REPORTS	75
RECEIVE OR DISTRIBUTE MESSAGES	65
DIRECT COMPLIANCE WITH SERVICE ORDERS	65
DETERMINE WORK PRIORITIES	60
DIRECT LABELING OF PATCH BAYS	60
WRITE CORRESPONDENCE	55
MAINTAIN DEFENSE COMMUNICATION SYSTEM (DCS) DATA BASES	55
MAINTAIN CIRCUIT DATA FORMS (DD FORM 1441)	55
COORDINATE OPERATIONAL CHANGES TO CIRCUITS OR CHANNELS WITH USERS OR DEFENSE COMMUNICATIONS AGENCY (DCA)	55
LABEL PATCH BAYS OR EQUIPMENT	55
TYPE FORMS, REPORTS, OR CORRESPONDENCE	55
DEVELOP PLANS TO INFORM COMMUNICATIONS CIRCUIT USERS OF CHANGES IN CIRCUIT CONFIGURATIONS	50
COORDINATE SPECIAL COMMUNICATIONS REQUIREMENTS WITH USERS OR DCA	45
ESTABLISH CHANGES IN CIRCUITS OR CHANNELS	45
FORMULATE CIRCUIT CUTOVER PLANS	45
CLEAN WORK AREAS	45
PARTICIPATE IN ALERTS OR RECALLS	45
DIRECT WIRING OF CROSS-CONNECTIONS ON DISTRIBUTION FRAMES	40
DEVELOP WORK METHODS OR PROCEDURES	

TABLE XXI
REPRESENTATIVE TASKS PERFORMED BY STAFF ADMINISTRATIVE PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=13)
WRITE CORRESPONDENCE	100
TYPE FORMS, REPORTS, OR CORRESPONDENCE	77
DRAFT REPORTS	62
WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS	62
PLAN BRIEFINGS	54
PARTICIPATE IN STAFF MEETINGS	54
RECEIVE OR DISTRIBUTE MESSAGES	46
DETERMINE WORK PRIORITIES	46
STORE CLASSIFIED INFORMATION OR MATERIALS	46
VISIT COMMUNICATIONS FACILITIES FOR FAMILIARIZATION	46
PREPARE OPERATIONAL MESSAGES	38
CONDUCT BRIEFINGS OTHER THAN NAVIGATIONAL AIDS COMMUNICATION MANAGEMENT OFFICE (NCMO) BRIEFINGS	38
MAINTAIN CORRESPONDENCE FILES	38
EVALUATE SUGGESTIONS	38
EVALUATE INSPECTION REPORTS OR PROCEDURES	31
MAINTAIN CIRCUIT HISTORY FOLDERS	31
INSPECT AREA SECURITY OR CLASSIFIED MATERIAL INVENTORIES	31
INDOCTRINATE NEWLY ASSIGNED PERSONNEL	31
DEVELOP WORK METHODS OR PROCEDURES	31
MAINTAIN PUBLICATIONS FILES	31
SCHEDULE LEAVES OR PASSES	23
SECURE FACILITIES	23
PREPARE APRs	23
PREPARE JOB DESCRIPTIONS	23

TABLE XXII
REPRESENTATIVE TASKS PERFORMED BY STAFF QC PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=12)
DRAFT RECOMMENDATIONS FOR SYSTEM IMPROVEMENTS	100
WRITE CORRESPONDENCE	92
COORDINATE SPECIAL COMMUNICATIONS REQUIREMENTS WITH USERS OR DCA	83
INSPECT COMMUNICATIONS FACILITIES	58
EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	50
CONDUCT BRIEFINGS OTHER THAN NAVIGATIONAL AIDS COMMUNICATIONS MANAGEMENT OFFICE (NCMO) BRIEFINGS	50
PLAN BRIEFINGS	50
INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	42
COORDINATE OPERATIONAL CHANGES TO CIRCUITS OR CHANNELS WITH USERS OR DEFENSE COMMUNICATIONS AGENCY (DCA)	42
DEVELOP PLANS TO INFORM COMMUNICATIONS CIRCUIT USERS OF CHANGES IN CIRCUIT CONFIGURATIONS	42
PARTICIPATE IN STAFF MEETINGS	42
ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS (OIs), OR STANDARD OPERATING PROCEDURES (SOPs)	42
EVALUATE SUGGESTIONS	42
SERVE AS A SPONSOR FOR NEWLY ASSIGNED PERSONNEL	42
DRAFT BUDGET OR FINANCIAL REQUIREMENTS	33
WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS	33
EVALUATE QUALITY CONTROL PROGRAMS	33
DIRECT QUALITY CONTROL PROGRAMS	33
FORMULATE CIRCUIT CUTOVER PLANS	33
INDOCTRINATE NEWLY ASSIGNED PERSONNEL	25
DEVELOP WORK METHODS OR PROCEDURES	25

TABLE XXIII

REPRESENTATIVE TASKS PERFORMD BY QC NCOs

TASKS	PERCENT . . . MEMBERS PERFORMING (N=13)
DIRECT QUALITY CONTROL PROGRAMS	100
MAINTAIN CIRCUIT PARAMETER TEST DATA FORMS (DD FORM 1697)	92
MAINTAIN IN-SERVICE OR OUT-OF-SERVICE QUALITY CONTROL (QC) REPORTS	85
MAINTAIN TREND ANALYSIS FILES	77
PLAN QUALITY ASSURANCE PROGRAMS	77
EVALUATE QUALITY CONTROL PROGRAMS	69
VISIT COMMUNICATIONS FACILITIES FOR FAMILIARIZATION	69
SERVE AS A SPONSOR FOR NEWLY ASSIGNED PERSONNEL	69
SCHEDULE EQUIPMENT FOR PMEL SERVICING	62
COORDINATE CIRCUIT OR EQUIPMENT PROBLEMS WITH OTHER TECHNICAL CONTROLS OR COMMUNICATIONS FACILITIES	62
ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	62
PERFORM ENVELOP DELAY DISTORTION TESTS	62
PERFORM IDLE CHANNEL NOISE TESTS	62
PERFORM IMPULSE NOISE TESTS	62
PERFORM PHASE JITTER TESTS	62
MAINTAIN DAILY LINK PERFORMANCE ASSESSMENT OR PERFORMANCE MONITORING PROGRAM FORMS	54
DIRECT QUALITY CHECKS OF EQUIPMENT AFTER MAINTENANCE OR INSTALLATION	54
ANALYZE CAUSES OF DIGITAL CIRCUIT FAILURES	54
WRITE CORRESPONDENCE	54
CLEAN WORK AREAS	54
DEVELOP WORK METHODS OR PROCEDURES	46
MAINTAIN CORRESPONDENCE FILES	46

TABLE XXIV
REPRESENTATIVE TASKS PERFORMED BY PMP MANAGERS

TASKS	PERCENT MEMBERS PERFORMING (N=7)
EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	100
DIRECT DEVELOPMENT OR MAINTENANCE OR STATUS BOARDS, GRAPHS, OR CHARTS	100
MAINTAIN TREND ANALYSIS FILES	86
ANNOTATE PERFORMANCE MONITORING TREND ANALYSIS CHARTS AND GRAPHS	86
MAINTAIN PERFORMANCE MONITORING GRAPHS OR CHARTS	86
PREVENT SYSTEM OUTAGES OR DEGREDEATIONS USING PERFORMANCE MONITORING DATA	86
DETERMINE LINK STATUS	86
PLAN BRIEFINGS	71
WRITE CORRESPONDENCE	71
TYPE FORMS, REPORTS, OR CORRESPONDENCE	71
MAKE RECEIVE SIGNAL LEVEL (RSL) GRAPHS	71
MAINTAIN LINK PERFORMANCE REPORTS	71
PARTICIPATE IN STAFF MEETINGS	71
MAINTAIN DAILY LINK PERFORMANCE ASSESSMENT OR PERFORMANCE MONITORING FORMS	57
RECEIVE OR DISTRIBUTE MESSAGES	57
MAINTAIN COMMUNICATIONS SYSTEM/FACILITY STATUS REPORTS	57
CALCULATE LINK IDLE CHANNEL NOISE (ICN) VALUES	57
COORDINATE SPECIAL COMMUNICATIONS REQUIREMENTS WITH USERS OR DCA	57
DRAFT REPORTS	43
PREPARE OPERATIONAL MESSAGES	43
DIRECT CIRCUIT OR SYSTEM CHECKS	43
IMPLEMENT ACTIVATION OR CHANGES OR CIRCUITS	43

TABLE XXV
REPRESENTATIVE TASKS PERFORMED BY TRAINING NCOICs

TASKS	PERCENT MEMBERS PERFORMING (N=13)
MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	100
ADMINISTER TESTS	100
COUNSEL TRAINEES ON TRAINING PROGRESS	100
SCORE TESTS	100
WRITE TEST QUESTIONS	100
EVALUATE OJT TRAINEES	92
CONDUCT FACILITY RATING TRAINING	85
DETERMINE OJT TRAINING REQUIREMENTS	85
RATE PROGRESS OF INDIVIDUALS IN TRAINING	77
TYPE FORMS, REPORTS, OR CORRESPONDENCE	77
ESTABLISH FACILITY PROFICIENCY RATING PROGRAMS	69
ESTABLISH STUDY REFERENCE FILES	69
CONDUCT OJT	69
PARTICIPATE IN ALERTS OR RECALLS	69
DEVELOP JOB PROFICIENCY GUIDES (JPG)	62
DIRECT OR IMPLEMENT OJT PROGRAMS	62
PLAN OJT	62
DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	62
EVALUATE TRAINING METHODS OR TECHNIQUES	54
PREPARE TRAINING REPORTS	54
INDOCTRINATE NEWLY ASSIGNED PERSONNEL	54
PROCURE TRAINING AIDS, SPACE, OR EQUIPMENT	54
VISIT COMMUNICATIONS FACILITIES FOR FAMILIARIZATION	54
DEVELOP WORK METHODS OR PROCEDURES	46
CLEAN WORK AREAS	46

TABLE XXVI

REPRESENTATIVE TASKS PERFORMED BY RESIDENT COURSE INSTRUCTORS

TASKS	PERCENT MEMBERS PERFORMING (N=8)
CONDUCT RESIDENT COURSE CLASSROOM TRAINING	100
RATE PROGRESS OF INDIVIDUALS IN TRAINING	100
ADMINISTER TESTS	100
SCORE TESTS	100
WRITE TEST QUESTIONS	100
COUNSEL TRAINEES ON TRAINING PROGRESS	88
DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	88
DIRECT OR IMPLEMENT TRAINING PROGRAMS OTHER THAN OJT	63
CLEAN WORK AREAS	63
DEVELOP RESIDENT COURSE OR CAREER DEVELOPMENT COURSE (CDC)	
CURRICULUM MATERIALS	50
SELECT INDIVIDUALS FOR SPECIALIZED TRAINING	50
DETERMINE RESIDENT COURSE TRAINING REQUIREMENTS	50
CONDUCT OJT	50
MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	38
COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	38
PROCURE TRAINING AIDS, SPACE, OR EQUIPMENT	38
SUPERVISE APPRENTICE TELECOMMUNICATIONS SYSTEMS CONTROL SPECIALISTS (AFSC 30730)	38
DEVELOP WORK METHODS OR PROCEDURES	38
EVALUATE TRAINING METHODS OR TECHNIQUES	38
PERFORM TOTAL PEAK TELEGRAPH DISTORTION TESTS	38
EVALUATE CLASSROOM INSTRUCTORS	38
PAINT FACILITIES	38
CONTINUITY CHECK PATCH CORDS	38

TABLE XXVII

REPRESENTATIVE TASKS PERFORMED BY CIRCUIT ANALYSIS NCOs

TASKS	PERCENT MEMBERS PERFORMING (N=5)
ANALYZE CAUSES OF AUDIO CIRCUIT FAILURES	100
ANALYZE CAUSES OF DIGITAL CIRCUIT FAILURES	100
MAINTAIN CIRCUIT EFFICIENCY REPORTS	80
MAINTAIN TREND ANALYSIS FILES	60
MAINTAIN TECHNICAL CONTROL COMMUNICATIONS WORK ORDER FORMS (DD FORM 1445)	60
WRITE CORRESPONDENCE	60
CLEAN WORK AREAS	40
MAINTAIN TROUBLE AND RESTORATION RECORD FORMS (DD FORM 1443)	40
MAINTAIN IN-SERVICE OR OUT-OF-SERVICE QUALITY CONTROL (QC) REPORTS	40
MAKE AUDIO CHANNEL LOOP-BACKS	40
MAKE DIGITAL CIRCUIT LOOP-BACKS	40
MAKE EQUIPMENT LOOP-BACKS	40
MAINTAIN MODIFIED USE OF LEASED COMMUNICATIONS FACILITIES REPORTS (DECCO)	40
TYPE FORMS, REPORTS, OR CORRESPONDENCE	40
PREPARE REQUISITIONS FOR EQUIPMENT OR SUPPLIES	40
PARTICIPATE IN ALERTS OR RECALLS	20
DIRECT DEVELOPMENT OR MAINTENANCE OR STATUS BOARDS, GRAPHS, OR CHARTS	20
MAINTAIN WIDEBAND OUTAGE RECORD FORMS (DD FORM 1698)	20
ANNOTATE PERFORMANCE MONITORING TREND ANALYSIS CHARTS AND GRAPHS	20
DIRECT QUALITY CONTROL PROGRAMS	20
EVALUATE QUALITY CONTROL PROGRAMS	20
COORDINATE CIRCUIT RELEASES WITH SUBSCRIBERS	20
DETERMINE WORK PRIORITIES	20
PLAN QUALITY ASSURANCE PROGRAMS	20
MAINTAIN FURNITURE OR EQUIPMENT INVENTORIES	20

TABLE XXVIII
REPRESENTATIVE TASKS PERFORMED BY NCMO PERSONNEL

TASKS	PERCENT MEMBERS PERFORMI (N=45)
PARTICIPATE IN ALERTS OR RECALLS	89
CLEAN WORK AREAS	82
MAINTAIN MISSION IMPAIRMENT REPORTS	80
PREPARE NCMO BRIEFINGS	76
MAINTAIN MASTER STATION LOG FORMS (DD FORM 1753)	71
STORE CLASSIFIED INFORMATION OR MATERIALS	71
NOTIFY COMMUNICATIONS SUPPORT FACILITIES OF SEVERE WEATHER WARNING CALLS	69
MAINTAIN COMMANDERS' SITUATION REPORTS (SITREPs) OR SUMMARIES	56
TYPE FORMS, REPORTS, OR CORRESPONDENCE	53
SECURE FACILITIES	51
COORDINATE REQUESTS FOR MAINTENANCE ASSISTANCE	49
DISPATCH MAINTENANCE SPECIALISTS OR EQUIPMENT	47
MAINTAIN VIP VISITOR LOGS	47
INITIATE RESPONSES TO EMERGENCY ACTION MESSAGES OR DISASTER REPORTS	47
DETERMINE WORK PRIORITIES	44
REPORT ITINERARY OF AFCC COMMANDER, VICE COMMANDER, OR CHIEF OF STAFF	44
MAINTAIN JOB/STATUS DOCUMENT FORMS (AF FORM 264)	44
CONDUCT NCMO BRIEFINGS	42
MAINTAIN VEHICLE CONTROL	42
COORDINATE RECEIVING OR DISTRIBUTION OF PARTS MAINTENANCE ACTIONS	42
COORDINATE POWER CHANGEOVERS WITH COMMUNICATIONS SUPPORT FACILITIES	40

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